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TO OFFER INPATIENT SERVICES AT RAYMOND W. BLISS ARMY  
COMMUNITY HOSPITAL VERSUS CONTRACTING EXTERNALLY

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The purpose of this study is to determine the cost-effectiveness of continuing to offer inpatient services at Raymond W. Bliss Army Community Hospital (RWBACH) (status quo) versus contracting externally (a make or buy decision) for inpatient services. The overall methodology for the study includes a review of the costs to make and buy inpatient services for RWBACH. The goal of the study is to provide the hospital with a basis for the realignment of the present organization of services while providing a management tool to the Commander in formulating the long term strategy and business plan for the facility. Portions of the study could be used in formulating resource sharing agreements, policies and procedures with the TRICARE contractor as the facility prepares to commence its contract.

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A STUDY TO DETERMINE THE  
COST-EFFECTIVENESS OF CONTINUING  
TO OFFER INPATIENT SERVICES  
AT RAYMOND W. BLISS ARMY COMMUNITY  
HOSPITAL VERSUS CONTRACTING  
EXTERNALLY FOR INPATIENT SERVICES

A GRADUATE MANAGEMENT PROJECT SUBMITTED TO  
THE FACULTY OF BAYLOR UNIVERSITY  
IN PARTIAL FULFILLMENT OF THE  
DEGREE OF MHA FOR THE  
GRADUATE PROGRAM IN HEALTH CARE ADMINISTRATION

BY

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JUNE 1996

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## ABSTRACT

The purpose of this study is to determine the cost effectiveness of continuing to offer inpatient services at Raymond W. Bliss Army Community Hospital (RWBACH) (status quo) versus contracting externally (a make or buy decision) for inpatient services. The overall methodology for the study includes a review of the costs to make and buy inpatient services for RWBACH. The goal of the study is to provide the hospital with a basis for the realignment of the present organization of services while providing a management tool to the Commander in formulating the long term strategy and business plan for the facility. Portions of the study could be used in formulating resource sharing agreements, policies and procedures with the TRICARE contractor as the facility prepares to commence its contract.

The final buy equation cost, without a discount, for the 590 inpatient cases if the services were provided downtown during Fiscal Year (FY) 1995 came to \$1,984,410. The equation is as follows:

Total CHAMPUS Allowable Charge (no discount):	\$1,904,103
Plus: CHAMPUS Professional Fees	+\$ 443,865
Less: Patient Cost-Shares:	<u>-\$ 363,558</u>
Equals: FY 1995 Total Cost to Buy 590 Inpatient Services at Sierra Vista Community Hospital	\$1,984,410

The final make equation provides the amount of the federal appropriations for FY 1995 required to provide the 590 inpatient services at RWBACH. This total amount was \$3,465,140 and breaks down as follows:

Total MEPRS Inpatient Expense	\$5,468,747
Total MEPRS Inpatient Expense	\$5,468,747
Less Inpatient Salary Savings	-\$2,128,754
Less Other MEPRS Savings	<u>-\$1,487,100</u>
Equals MEPRS Fixed Costs	\$1,852,893
Less MEPRS Fixed Costs	<u>-\$1,852,893</u>
Equals: The Revised Federal Appropriation for RWBACH For FY 1995 to Provide 590 Inpatient Services	\$3,465,140

The study shows a cost savings of \$1,480,730, or 43 percent, could have been made, with no discount, by contracting for inpatient services at Sierra Vista Community Hospital. The agreed upon 10 percent discount would increase these savings to \$1,671,140, or 48 percent, over the cost of providing the inpatient services at RWBACH.

## TABLE OF CONTENTS

ACKNOWLEDGEMENTS .....	ii
ABSTRACT .....	iii
LIST OF ILLUSTRATIONS .....	vi
CHAPTER	
I.    INTRODUCTION .....	1
Conditions Which Prompted the Study .....	1
Statement of the Problem or Question .....	10
Literature Review .....	13
Purpose .....	21
II.   METHODS AND PROCEDURES .....	23
Buy Equation .....	24
Make Equation .....	26
Limitations of the Study .....	29
III.  RESULTS .....	30
Buy Equation .....	30
Make Equation .....	33
Buy/Make Results .....	35
IV.   DISCUSSION .....	37
V.    CONCLUSIONS AND RECOMMENDATIONS .....	39
DEFINITIONS .....	41
APPENDIX	
1.    Inpatients by DRG in Tucson/Sierra Vista Facilities .....	43
2.    Partnership Agreements .....	51
3.    Inpatient Workload by DRG FY1995 .....	52
4.    MEDCOM Manpower Assessment Model Results .....	56

APPENDIX (cont)

5. MEPRS Inpatient Costing Worksheets .....	62
6. CHAMPUS Health Care Summary by Primary Diagnosis .....	72
REFERENCES .....	77
LIST OF TABLES	
Table 1. Alternative CHAMPUS Allowable DRG Rate Discounts .....	36

## LIST OF ILLUSTRATIONS

Figure	Page
1. MHSS Population by Beneficiary Category .....	7
2. RWBACH Catchment Area Population .....	11

## CHAPTER I

### INTRODUCTION

#### Conditions which prompted the study

The delivery of health care in United States has changed dramatically over the past 50 years. During the 1940s the federal government became involved in the expansion and creation of medical facilities to increase access to care for the general public. The Hill-Burton Act in 1946, more commonly known as the Brick and Mortar Act, created legislation providing federal grants and loans for the construction of new hospitals and for the expansion of existing facilities. A hospital which accepted these grants and/or loans accepted collateral responsibility to provide care for indigent patients (Rakich, Longest and Darr 1992).

Healthcare consumed approximately 4.4 percent of the gross domestic product (GDP) in 1950, then known as the gross national product (GNP) (Williams and Torrens 1993). Access to care continued to be a focal point for healthcare into the 1960s. The federal government tried to improve access to healthcare by increasing the supply of providers. Providers, such as physicians and nurses, were granted scholarships and financial assistance in an attempt to motivate more individuals to enter the career field. (Williams and Torrens 1993).

Healthcare changed directions with the passage of the amendments to the Social Security Act of 1965 creating Title XVIII, Medicare and Title XIX, Medicaid. With the passage of this legislation the federal government assumed responsibility for financing care for millions of elderly and indigent people, who previously had little or no access to healthcare (Rakich, Longest

and Darr 1992). The Medicare budget alone exceeded \$4.5 billion in its first year (Davis, et al. 1990). The programs did increase access to healthcare, but not without a higher than expected cost. There was no incentive for hospitals or providers to deliver cost efficient healthcare given the established method of reimbursement (Aaron 1991). The more the provider could do for the patient, the more reimbursement the government paid under its fee-for-service (FFS) reimbursement system. The Medicare reimbursement was set at a “reasonable rate” plus two percent as an incentive for providers to see Medicare patients (Davis, et al. 1990). The government used fiscal intermediaries (FI) to administer the program benefits. Initially, the primary FI was the Blue Cross Plans which also served the medical profession. This conflict of interest caused the FI to not question excessive length of stays (LOS) or costs; thereby, limiting the government’s ability to contain the program’s costs (Davis, et al. 1990).

The percentage of the GNP spent on healthcare rose from 5.9 to 8.3 percent between 1965 and 1975 (Williams and Torrens 1993). Increased hospital admissions and services for the elderly were the primary causes for the growing healthcare costs. Medicare was the largest buyer of healthcare in the United States in early 1970 causing the government to implement cost containment controls (Aaron 1991). This new trend caused the government’s focus to shift from access to cost (Davis, et al. 1990).

The first of the cost control attempts were the Social Security Amendments of 1972, Public Law 92-603, which created the Professional Standards Review Organization (PSRO). The PSRO was intended to monitor quality and ensure efficiency in the delivery of healthcare funded by the federal government. Section 223, the General Provisions and Professional

Standards Review, gave Medicare the ability to deny reimbursement for inefficient healthcare (Davis, et al. 1990).

Outpatient medical care was one of the leading areas of increasing healthcare costs. These costs were spurred by: 1) increasing technology which allowed chronic patients to be treated as outpatients or in other facilities; 2) an increasing supply of physicians; 3) changes in surgery and anesthesia practice patterns to allow more noninvasive procedures without overnight stays; and 4) increased quantity of utilization review (UR) of inpatient cases (Robinson 1994 and Roughan 1994). Hospital outpatient departments increased dramatically from 49 to 81 percent between 1984 and 1990. Similarly, outpatient surgery increased by 304 percent between 1979 and 1989 (Sulvetta 1991). Rigorous inpatient hospital cost containment programs also led to increased outpatient costs (Wickizer, Wheeler and Feldstein 1991).

The Health Maintenance Organization (HMO) Act of 1973 was designed to compete with FFS plans by spurring lower healthcare cost alternatives (Mayer and Mayer 1985). The HMO Act provided the political and financial support needed for HMOs to grow and expand. The government provided \$145 million in grants and \$219 million in loans between 1973 and 1983 in the development of 115 HMOs (Davis, et al. 1990). By 1975 the number of HMOs in the United States had grown from 33 to 133 with more than 5.8 million enrolled beneficiaries. This number grew to 323 HMOs with more than 35 million beneficiaries by 1991 (Mayer and Mayer 1989 and Johnsson 1992).

Corporate employers, the second largest buyer of healthcare in the United States, followed the federal healthcare cost containment initiatives. This was due in part to a provision

in the HMO Act which required employers with greater than 24 employees to offer an HMO option to employees if a local, federally-funded HMO was available. Cost containment was also an incentive to employers as corporate healthcare coverage costs rose from \$49 billion in 1980 to \$93 billion in 1984 (Davis, et al. 1990). Corporations tried many methods to control costs including: increased cost shares and deductibles; utilization and claims reviews; HMO enrollment options; and wellness programs.

Corporate cost containment was the forerunner of the concept of managed care. The managed care concept means the healthcare manager is responsible to control the use and quality of healthcare provided, thus controlling the costs. The healthcare manager would try to change provider practice patterns through the use of financial incentives, penalties or other administrative procedures. Managed care tries to influence when and where healthcare is provided, how much is provided and the length of treatment provided (Boland 1991). The goal of which is to ensure the most cost efficient care is provided while not sacrificing quality. Managed care, through increasing access and reducing inappropriate services, can improve patient health outcomes (Burke 1991).

One of the corporate methods used to control cost, UR, became a foundation of managed care. Utilization review includes:

- prospective reviews, such as precertification
- concurrent reviews, which includes discharge planning and LOS authorization and
- retrospective reviews

Many HMOs proved to be successful in monitoring the quality of care through careful UR

(Anderson 1992). Utilization review programs provided cost containment measures and fueled the trend toward outpatient rather than inpatient treatment. The focus of healthcare delivery shifted to ambulatory care and caused hospital occupancy rates to fall dramatically as outpatient procedures grew. Outpatient visits for healthcare grew from 181 million in 1970 to 352.2 million in 1989 (Williams and Torrens 1993).

The federal government helped swing the momentum toward ambulatory care with the implementation of the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) creating Diagnostic Related Groups (DRGs) as the basis for reimbursing hospitals for Medicare and Medicaid expenditures (Sulvetta 1991). The DRG case-mix system classified patients into one of 457 DRGs based on diagnosis and reimbursed hospitals a fixed amount based on the diagnosis, rather than on a fee-for-service (FFS) basis. This placed a financial risk and accompanying incentive on the facility to contain costs per admission (Teisberg, Porter and Brown 1994). Medicare inpatient days decreased from 116 million in 1983 to 91 million in 1986 following DRG implementation (Davis, et al. 1990).

Capitation was developed during this period in an effort to create an incentive for providers to practice more efficiently. Under capitation providers are paid a set amount per member per month (PMPM) to provide all healthcare for enrolled members. Providers were placed at financial risk for costs exceeding their capitated payments and conversely profited by controlling costs (Bader and Matheny 1994).

Employer efforts to control escalating healthcare costs have included: 1) cutting benefits; 2) shifting costs to employees through higher deductibles and copayments; 3) use of utilization

targets; 4) medical savings programs; 5) penalties for not strictly complying with insurance requirements such as preauthorizations; and 6) directly contracting with providers (McCally and Nauert 1993 and Trauner, 1987). Healthcare contracting gained momentum increasing by 12 percent, from 7,808 to 8,773 contracts, between 1993 and 1994 (Moore 1995). A survey of 250 top service firms and manufacturers found that 91 percent expected direct contracting with providers to grow in popularity in future years (Kenkel 1992). Seventy-five percent of civilian physicians had at least one managed care contract in 1993 (Eisenberg 1993). The future of contracting is expected to include all facets of the continuum of care, coordinated networks and more measurable quality tools (Johnsson 1992). If there are departments in the hospital that can be cost-effectively outsourced and still achieve the desired results, hospitals are going to contract the departments out, according to a senior vice president for strategic marketing and communications for hospitals (Moore 1995). The federal government has seized the contracting initiative with its Medicare program as more than 200 HMOs had contracts for healthcare coverage incorporating 2.6 million Medicare beneficiaries in 1994 (Polich and Riley 1994).

The Department of Defense (DoD) healthcare system lagged somewhat behind its civilian counterparts in pursuing cost containment measures. The DoD operates a two-tiered healthcare system consisting of the direct care system, known as the Military Health Services System (MHSS) and the military beneficiary insurance program, known as the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS). The MHSS operates 550 clinics worldwide with more than 127 hospitals in the United States. The costs of the MHSS in fiscal year (FY) 1995 were expected to be \$11.6 billion with an additional \$3.6 billion for CHAMPUS,

making the MHSS the largest healthcare system in the world (Baine 1995).

The MHSS provides services to 1.7 million active duty personnel and 6.6 million other beneficiaries (Baine 1995). The MHSS overall beneficiary population is depicted in Fig. 1. The second tier of the DoD healthcare system is the CHAMPUS program. Created in 1956,

## MHSS Population by Beneficiary Category FY 1995

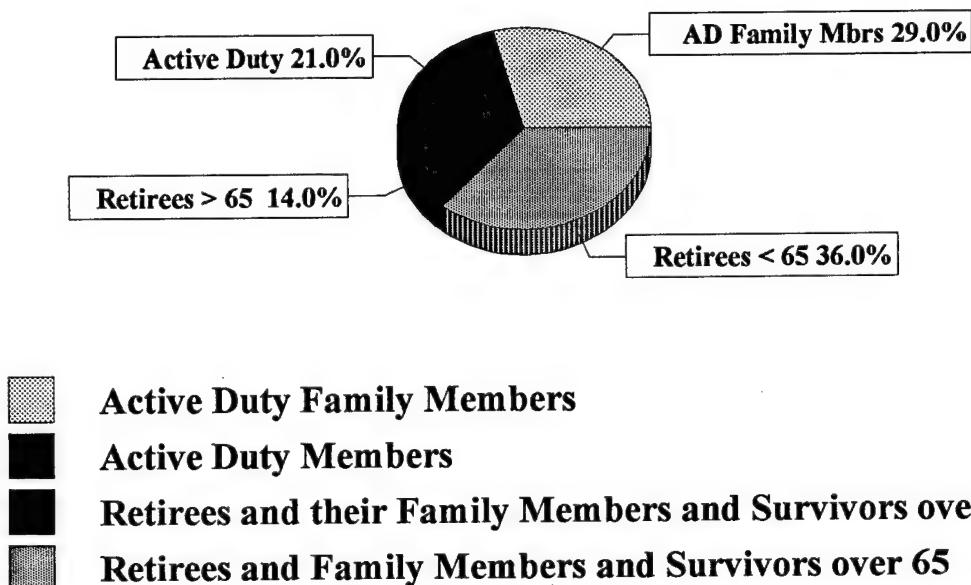


Fig. 1.

Source: Baine, GAO Report, March 1995

CHAMPUS is intended to provide comprehensive health benefits to family members of active duty and retired military personnel, retirees and survivors up to the age of 65. Between 1985 and 1989 CHAMPUS costs nearly doubled from \$1.4 billion to \$2.5 billion (Baine 1990). In 1985 managed care was proposed as an alternative for the MHSS and several initiatives were created

to contain rising CHAMPUS costs. A Government Accounting Office (GAO) study conducted in 1988 estimated 43 to 53 percent cost savings could be realized by transferring CHAMPUS patients to the MTF (GAO Report 1990). The DoD placed financial responsibility for CHAMPUS on the individual services in 1988 and CHAMPUS has used a Prospective Payment System (PPS) based on the Medicare PPS model ever since (Carter, et. al. 1994 and Hilsenrath 1990). Another initiative started in 1988 was the Military-Civilian Health Services Partnership Program (called the Partnership Program) through which individual MTFs formed agreements with providers to provide care for DoD beneficiaries within the MTF. The partnership provider would agree to accept a reduced CHAMPUS reimbursement from the maximum CHAMPUS allowable. The partnership provider's overhead costs are reduced since the MTF provides the ancillary staff and support, while the MTF gains through increased access and negotiated costs. By 1990 more than 1,300 partnerships were formed (GAO Report 1989).

Congress directed a new cost saving initiative in 1987 entitled the CHAMPUS Reform Initiative (CRI). The CRI attempted to control costs of healthcare with fixed-price contracts negotiated with private healthcare providers. The DoD established five guidelines governing CRI including (Baine 1987):

- 1) establish fixed-price contracts through which the provider assumes financial risk
- 2) ensure voluntary enrollment of beneficiaries to ensure increased access
- 3) provide healthcare finders, who can manage the referral process and conduct first level review for medical care appropriateness, to increase coordination of medical benefits
- 4) providers must adhere to quality assurance standards

5) streamlined administrative procedures

The CRI was found to have saved the DoD more than \$7 million in the first six months of operation according to a Rand Corporation evaluation (Kenkel 1990). Another government cost containment strategy was the Catchment Area Management (CAM) project which began in 1989. This program gave the MTF commander responsibility for the MTF's CHAMPUS budget for the catchment area. The commander was authorized to allocate these funds in an attempt to deliver optimal healthcare within the MTF's catchment area. This was the first time the local MTF commander had control over both direct care and CHAMPUS budget dollars (Badgett 1990). The CRI and CAM initiatives were similar in that both programs incorporated financial risk. The incentive to establish successful contracts for healthcare became imperative to the MTF commander in an attempt to control costs. One CAM site, Evans Army Community Hospital, was able to post a \$17 million CHAMPUS cost avoidance from 1989 to 1992 (Armstrong and Took 1993).

The DoD started several contract initiatives with civilian hospitals, physicians, health insurers, HMOs, preferred provider organizations (PPO) and medical suppliers (Honiberg 1990). The present initiative, referred to as TRICARE, began in December 1993 and is designed to improve access and cut costs. TRICARE offers beneficiaries a choice of three health plans once the program is fully implemented. Beneficiaries will be free to choose TRICARE Prime, an HMO option; TRICARE Extra, offering a network of preferred providers; or to use TRICARE Standard, the standard CHAMPUS option (Baine 1994). The DoD goal is to have TRICARE fully implemented through 12 joint service regions by May 1997 with a five year implementation

cost of approximately \$17 billion (Baine 1995). TRICARE is based on beneficiary enrollment, capitation to allocate funds and stresses utilization management (UM), similar to civilian managed care programs. The fundamental principle of TRICARE is to award regional managed care contracts to civilian organizations to provide portions of the medical treatment package available to enrolled beneficiaries, previously provided by the MHSS or CHAMPUS, in an attempt to reduce costs while increasing access and maintaining quality. The pursuit of healthcare contracts by civilian and government agencies has become commonplace over the past twenty years, but it can be complicated, risky and difficult to properly implement (Baine 1995, Straley and Swaim 1994 and Fisher, et. al. 1991).

Statement of the Problem or Question

Contracting for healthcare has become a very cost-effective means of delivering levels of care many facilities may not otherwise be able to provide due to military budget and staff constraints. Many smaller facilities have been forced to seek negotiated contracts for this reason. The recent trend to merge, consolidate and even close medical facilities that were not cost effective is not unique to the civilian sector. As the DoD and the corresponding military healthcare budgets have declined over recent years, the need for more cost effective delivery of healthcare has taken on increased importance. Several MTFs have closed or been realigned as a result of the Base Realignment and Closure (BRAC) process and MTF commanders have been forced into a more business oriented bottom-line approach to managing their MTFs.

Raymond W. Bliss Army Community Hospital (RWBACH) located on Fort Huachuca,

Arizona faces many of these same dilemmas. The MTF has undergone a series of downsizing initiatives over the past several years, the results of which now place the MTF in a precarious position. The current inpatient ward can house 28 patients, but since obstetrical services were discontinued (May 1993) and the intensive care unit closed (February 1994) the average daily inpatient census has dropped to approximately eight patients. The MTF also averages five same day surgery cases per day. The RWBACH catchment area population consists of: 6,013 active duty members; 7,128 active duty family members; 4,013 retirees; 6,489 retiree family members, and 2,200 students of the U.S. Army Intelligence Center and School (Fig. 2).

Fort Huachuca is located in Sierra Vista, Arizona, an area considered rural by federal

## RWBACH Catchment Area Population FY 1995

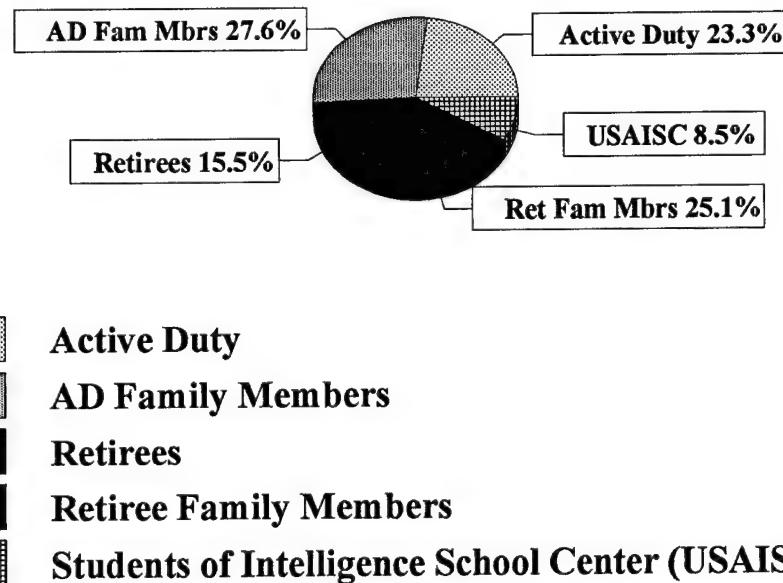


Fig. 2

Source: DEERS Database, December 1995

standards and there is only one local civilian hospital. Sierra Vista Community Hospital is a 71 bed, not-for profit modern acute-care facility with more than 400 hundred employees and over \$45 million in annual gross revenues. Due to the isolated location of Sierra Vista, a large number of inpatients must be transferred out of the catchment area to either Tucson, Arizona or William Beaumont Army Medical Center (WBAMC) in El Paso, Texas. A comprehensive listing of inpatients by DRG that received care in Tucson medical facilities or at Sierra Vista Community Hospital appears at Appendix 1.

Numerous steps have been taken by RWBACH to reduce the costs of these patient transfers. Discounts ranging from 10 to 40 percent have been negotiated with more than 800 providers in Sierra Vista and Tucson. These cost saving initiatives have helped reduce the MTF's CHAMPUS budget from more than \$11 million in 1992 to \$7.5 million in 1994. The MTF also has internal partnership agreements with more than 20 providers in various specialties providing an average discount of 30 percent from the CHAMPUS maximum allowable charge (Appendix 2). The MTF management of these partnership provider agreements has significantly increased in-house access to care and served as a cost avoidance to CHAMPUS. Currently, the MTF is negotiating an external partnership with Sierra Vista Community Hospital to allow the MTF's internal medicine providers to treat CHAMPUS beneficiaries in that civilian facility; thereby, further reducing CHAMPUS costs. The prospect of RWBACH discontinuing services, specifically inpatient services, has become a weekly topic of discussion. This issue is repeatedly addressed during the MTF's Quality Council meetings and teleconferences with higher headquarters. Recently RWBACH has had to address FY 1997 staffing reductions as well as a

\$1.08 million budget cut. The option of closing inpatient services is continually brought up as a possible means to achieve these financial and human resource cuts. The MTF commander must continue to maintain the bottom-line focus, while attempting to steer the hospital's long term strategy with other new initiatives and sound business decisions. The problem for the MTF commander is to determine what initiative(s) to develop next given RWBACH's precarious position.

### Literature Review

The intent of the literature search was to discover previous works which discuss cost containment, negotiations, considerations and motivations related to contracting for medical services in civilian and government healthcare facilities. The secondary motive for the literature review was to identify a make or buy analysis model for healthcare services suitable for use in this study.

In 1989, the Navy Medical Department (Bureau of Medicine) reorganized placing emphasis on managed care concepts. The Navy sought to improve the management of its cost structure. To help minimize costs while generating increased productivity the Navy program identified three components: 1) the organization must capitalize on information access, or having the proper information on-hand when needed to evaluate options and make decisions; 2) the resources used must be able to be shifted easily as economic conditions change; and 3) decision making must be decentralized allowing decisions to be made closer to the source of information (Hilsenrath 1990).

There are numerous articles available which provide advice and guidelines for the negotiation process. The negotiation process is important in order for the hospital to minimize risk and maximize opportunities. The hospital's Information Management Department (IMD) is critical in providing the tools to negotiate successfully. The IMD needs to provide actual costs, monitor resource utilization, bill and track receivables and evaluate the contract (Shapleigh 1993). According to Shapleigh, there are six steps to the managed care contracting cycle. First, is to determine the optimal pricing schedule. The hospital must know its true costs of doing business. The MTF should be able to anticipate possible questions such as defining the unit of service being priced, the number of units expected in the contract, how uncertainties regarding volume are addressed and the treatment of services beyond the scope of the contract (Honiberg 1990). There are numerous reimbursement methods to select from during the contract negotiation process including straight charges, straight discount on charges, sliding scale discount on charges, straight per diem charges, sliding scale per diem, differential by day in hospital, DRGs, service-related case rates, case rates, bed leasing, and capitation (Scroggins and Brayer 1993 and Kongstvedt 1995). Based on RWBACH's past experiences, the DRG method is the most likely choice since it offers the incentive of sharing risk with the contracted hospital, which makes the hospital an active partner in controlling utilization and limiting expenses.

The second step is to inform all hospital staff of the contract terms beginning with the admission process. Admission criteria should be a part of the contract and the staff must be educated as to the particulars of these criteria. The next three steps are concurrent process screening, utilization review and quality monitoring. Once patients are admitted they must be

reviewed to evaluate continued stays in the facility. Simultaneously, the hospital should monitor resource use in patient care to identify possible areas for cost controls. Quality assurance should be automated and provide indicators for routine quality review. The sixth, and possibly most crucial, step is to continually track the performance of the contract. The hospital should actually monitor this throughout the life cycle of the contract to assess the success or failure of the contract. Variances from projected revenues, costs or utilization should be analyzed (Scroggins and Brayer 1993 and Shapleigh 1993).

According to another article discussing the negotiation process, the hospital must have identified its goals prior to beginning the negotiation process. Other areas to consider include provider coverage and availability, and economic benefits. The contract itself should identify certain fundamental issues which include: 1) malpractice insurance; 2) the duties and responsibilities of the staff; 3) the use of ancillary services; 4) length of the contract; 5) termination; 6) changes in the law and how the contract addresses them; 7) payments to the hospital for services; and 8) dispute resolution (Caesar 1992 and Caesar 1993).

Contract negotiation stresses the clear identification of contractual parties and the need to research the other businesses' history and financial credibility. The contract should specifically define all covered services and the patient referral process. The terms of claims payments must be addressed as well. The hospital should determine the composition of the contractor's governing board and any possibility of sitting on it. Other issues of importance include quality control, ancillary service use, patient satisfaction measurement, marketing, dispute settlement, malpractice insurance, exclusivity and noncompetition clauses, length of the contract and the

need for legal counsel prior to signing any binding agreement (Masterson, 1992).

Managed care contracts are of two distinct varieties. First is the usual vendor-vendee relationship where a healthcare organization provides a service and the managed care plan is the service buyer. The second method has providers in long-term relationships with managed care plans sharing risk, selling services and sharing in the revenues (Bonney 1995). The negotiation of the contract should be a win-win situation for both parties. Bonney presents several principles for managed care contracting. The healthcare organization must be desirable, normally for more than just price reasons. There are several factors which increase the desirability of the organization including: location; number, quality and location of providers; image; service quality; technology; unique services, and managed care attitude. The next principle is to carefully consider several buyers and their long term survivability in choosing a contractual partner. Preparation is the basic foundation to successful contract negotiation in the service industry (Wickesser 1994). Prior to negotiations, the organization should define goals and objectives desired from the contract and develop relationships with the other organization. In a small or rural area, the negotiation team normally includes the Chief Executive Officer (CEO) and Chief Financial Officer (CFO). Others who may need to participate include the Chief Operating Officer (COO), managed care director and legal counsel. The larger team approach improves the organizational buy-in of the contract; increases the ability to listen during negotiations; decreases the possibility of making mistakes; increases understanding of complex issues; provides the ability to delegate tasks; provides for continuity within the organization; and provides an opportunity to train personnel for future negotiations. After the negotiation process

is completed, it is absolutely essential to finalize the contract using periodic sessions to discuss issues before they become problems. When preparing for the negotiation session, high, yet reasonable targets should be developed reference the terms of the contract. Contractual issues not affecting price are extremely important -- such as copayments, coordination of benefits and the claims process -- and should not be neglected. The administrator should ensure the terms of the contract are kept simple so they can be executed easily. Finally, during the negotiation process all parties must stay focused on the objectives, listen to opposing views and maintain a professional approach (Bonney 1995).

Healthcare contracts provide numerous benefits and risks. Selective contracting is seen as a necessary ingredient for long-term strategy success (Zaretsky 1991). When evaluating possible contracts several points should be considered. Numerous businesses shy away from establishing government business, thinking there is no profit to be had. These negative attitudes must be overcome through one-on-one contact with local businesses. The government contracting process is extremely complex and considerable information must be reviewed to be successful. The MTF must ensure possible contractors understand the time requirements to prepare proposals and develop business plans. The MTF should ensure information is available as soon as possible to aid potential contractors in preparing adequate proposals prior to the actual request for proposal release.

The MTF should evaluate contract possibilities to determine if the contract will be incremental revenue; whereby, the contractor's revenue increases at the expense of a competitor, or is substituted revenue where one source of revenue is merely replaced by another. The MTF

must be able to define and measure the quality of care rendered (Honiberg 1990). Quality of care issues include what the contract requires in terms of quality assurance programs and UR (McCally and Nauert 1993). The MTF must consider patient access issues to ensure access will be maintained at current levels or increased. The MTF must review the specialties and types of providers included in the contract (Rothenberg 1994). Other issues that will need to be considered include required changes to the credentialing process, medical record availability, malpractice coverages, grievance procedures and appeal processes, and contract termination provisions (Scroggins and Brayer 1993).

The MTF must take into consideration what the motivating factors are for both parties in negotiating a healthcare contract. A knowledge of the other party's motivation can be very useful during contract negotiations. Primarily, the civilian hospital will be acutely interested in improving, or in some cases holding onto, a volume of inpatient days and outpatient procedures (Kongstvedt 1995). The hospital is basically trading lower predictable prices in return for increased volume with its discounted agreement (Fine 1994). In the case of SVCH, the CEO is keenly aware of the profit that can be made from increasing inpatient days at the expense of the MTF. The CEO wants to increase his military business partly to increase his inpatient and income levels and partly to ensure his hospital creates strong ties with the MTF prior to the TRICARE contract being let next year. He is afraid if he does not properly position his facility he may be closed out. Therefore, he is attempting to position his organization for success in the rapidly changing healthcare environment. Other possible motivations could be to increase the hospital's competitive position, increase patient and workload volume, and to increase

opportunities for provider staff competency and training through a broader case load (Wakefield, et. al. 1994).

The government routinely contracts for services to achieve one or more of the following: 1) to control or decrease costs; 2) to limit risk exposure; 3) to lessen taxpayer or beneficiary costs; or 4) to improve or maintain services without increasing costs (Jensen 1989). The government has used these as goals for such healthcare initiatives as the Primary Care for the Uniform Services (PRIMUS) program, CHAMPUS, and now with TRICARE.

Two Graduate Management Projects completed in recent years provided the basis for the make or buy methodology utilized later in this study. The first report reviewed cardiothoracic surgery at Wilford Hall Medical Center. This report provided great insight into the costing methodologies available and how to determine differential rather than full costs for a specific product line within a MTF (Watkins 1995). The second report conducted a cost comparison of inpatient workload at Wilford Hall Medical Center to determine if CHAMPUS was a more cost-effective means of delivering healthcare (Rogers 1994). Both of these reports utilize the Medical Expense and Performance Reporting System (MEPRS) data as a principle building block of their studies.

The MEPRS is the principle financial cost gathering mechanism within MTFs. The MEPRS contains manpower, expense and workload performance data by work center for MTFs and is based on six functional areas. The areas include: inpatient; outpatient; dental; ancillary services; support services; and special programs. Ancillary services include: clinical laboratory; pathology; radiology; pharmacy; and other areas contributing to patient diagnosis. Support

services include laundry service, food service, housekeeping and other non-medical areas.

Special programs include graduate medical education (GME), public health services and decedent affairs. The functional areas of MEPRS further identifies separate work centers within the MTF and tracks workload and expenses for each center. Average expenses from ancillary and support work centers are reallocated to the work center. The allocation is based on the percentage of ancillary and support workload performed for the specific work center. The MEPRS system for determining each center's overhead is to use the total physician and support personnel costs, utility costs, building and equipment depreciation, expendable supplies, fire and police protection and a percentage of workload estimates for ancillary services (Callahan 1991).

Expenses are entered in MEPRS as a Direct Expense Schedule (DES). The DES identifies all expenses associated with each work center. Information is provided by departments and is compiled by MEPRS. Workload information is gathered from the Composite Health Care System (CHCS). Workload statistics are calculated by the MEPRS using stepdown assignment statistics (SAS) data sets. Each SAS data set includes an identification number related to specific workload measures and MEPRS work centers and the corresponding workload for each center. The Expense Allocation System (EAS) is the automated system that processes the actual cost allocations from the intermediate operating accounts to final accounts. The EAS charges direct expenses of the ancillary and support work centers to the inpatient, outpatient, dental or special program which benefited from the expenses.<sup>8</sup> Expenses from the cost pools are allocated to final operating accounts in the EAS during the final purification process. The Final Purification Report identifies the expense distribution from cost pools to final accounts. The report depicts

the dollar amounts calculated and allocated during purification. The Computation Summary provides the breakdown of total work center expenses by direct expense, support costs, ancillary costs, expenses formed cost pools and a final purified amount.

Fundamental to the MEPRS methodology and the study to be undertaken is an understanding of direct, indirect, fixed and variable costs. Direct costs are linked directly to a specific service, such as salaries of those providing the service. Indirect costs are costs which are not directly linked to providing of a specific service, such as the costs of operating the command section of MTF. The command section's salaries and supplies are not directly linked to any service within the hospital, but they are an overhead cost that must be paid by the facility. The easiest way to differentiate between direct and indirect costs is that direct costs go away with the deletion of the service. For example, if inpatient services are deleted then the costs of labor for the inpatient ward would no longer be required -- they would go away. These are direct costs. If inpatient services are deleted, the cost of operating the command section does not go away; therefore, these would be indirect costs. Fixed costs are those costs that do not change no matter what volume of business the facility does. An example of a fixed cost would be the mortgage payment for the building. Variable costs fluctuate with volume. A simple example of variable costs are utility payments. The more of a utility the business consumes the more it will have to pay for the utility (Finkler 1994).

#### Purpose

The purpose of this study is to determine the cost effectiveness of continuing to offer

inpatient services at RWBACH (status quo) versus contracting externally (a make or buy decision) for inpatient services. There are several variables which must be taken into consideration to make an educated business decision of this magnitude. These variables include: 1) the number of FY 1995 dispositions, or cases, by DRG reported by MEPRS for RWBACH; 2) the total FY 1995 inpatient MEPRS expense; 3) the total FY 1995 inpatient third party collections; 4) the CHAMPUS cost-shares applicable to the FY 1995 RWBACH inpatient workload, and 5) the FY 1995 RWBACH military and civilian inpatient personnel salaries. The more difficult to quantify variables, such as the social and political ramifications of the decision, should also be accounted for with some type of methodology. The study must utilize these variables in the determination of whether inpatient services are provided in house or services are to be contracted externally. The alternate hypothesis is inpatient services are more cost effective if provided at RWBACH. The null hypothesis being that inpatient services are not more cost effective if provided at RWBACH, in other words, inpatient services should therefore be contracted externally.

## CHAPTER II

### METHODS AND PROCEDURES

To validate the appropriateness of the results the following assumptions were made:

- 1) The data input into MEPRS is the only currently available cost accounting system providing the data needed to undertake this study and will be used for this reason.
- 2) The BRAC commission would not make any adverse decisions regarding the future of Fort Huachuca within the next three years.
- 3) No significant readiness or mission changes, which would change assigned personnel strength levels, will occur at RWBACH or on Fort Huachuca within the next three years.
- 4) Both RWBACH and Sierra Vista Community Hospital have recently passed JCAHO inspection standards; therefore, the quality of care provided is and will remain similar in both facilities.
- 5) Market conditions such as inflation rates, population growth, healthcare costs and labor costs will not change significantly in the Sierra Vista area over the next three years.
- 6) The present negotiated agreement for a 10 percent discount on inpatient services at Sierra Vista Community Hospital will be continued.

The preliminary data collection focuses on the MEPRS data base. Based on the report by Rogers cited previously, there are shortcomings in the MEPRS data that must be addressed in conducting the study. The overall methodology for the study will include a review of the costs to make and to buy inpatient services for RWBACH similar to that used in the Rogers' report.

Buy Equation

To determine the buy costs, FY 1995 CHAMPUS data will be used to estimate the cost of buying the study period inpatient workload. The FY 1995 Inpatient Workload at RWBACH by DRG and the associated CHAMPUS charges are provided by Appendix 3. This worksheet includes the number of cases per DRG experienced during the FY and the cumulative CHAMPUS charge per DRG. These by DRG totals are then summed to reach the total amount, based on CHAMPUS charges, that RWBACH would reasonably expect to pay for the 590 FY 1995 inpatient cases had the services been provided elsewhere. This is, accordingly, the initial buy equation price. Adjustments to this initial buy price will include estimating and adding the estimated CHAMPUS professional fees and estimating and subtracting the CHAMPUS patient cost-shares (Rogers 1994).

Graduate Medical Education (GME) expenses are purposely excluded from the Rogers' equation since they do not apply to this facility. Facility Depreciation is also excluded from the study since it is included in the MEPRS calculations as discussed previously. The Roger's study methodology accounted for the impact of the Third Party Collection Program (TPCP) and Other Health Insurance (OHI). The Rogers' methodology subtracts the total TPCP inpatient collections from the make equation and goes through a process to estimate the impact of OHI on the buy equation. The Sierra Vista Community Hospital would have at least an equal opportunity and sufficient sophistication to collect from patients' OHI; therefore, it is reasonable to expect the total amount collected would approximate that collected through the TPCP by RWBACH. Thus, the amount collected by Sierra Vista Community Hospital added to the buy side of the equation

and the RWBACH inpatient collections added to the make side of the equation offset any impact the TPCP or OHI would have on the make versus buy decision. It is for this reason that TPCP and OHI are purposefully left out of the equation.

The CHAMPUS professional fees to be added into the buy equation are based on the FY 1995 hospital and professional fees paid. The fees paid to CHAMPUS during the year for inpatient services include obstetrical (OB) care and are therefore inflated since the professional fees for the duration of the pregnancy through delivery are included in the inpatient fees paid. The amount is also not appropriate to the study since none of the inpatient services provided at RWBACH were for OB care. Therefore the amount of professional fees paid should be adjusted to eliminate OB from the equation so as not to bias the outcome. Accordingly, the OB hospital cost will be subtracted from the total government hospital costs and the OB professional cost will be subtracted from the total government professional costs. The new professional cost amount divided by the new hospital cost amount provides the percentage of costs attributable to professional fees with OB excluded. This percentage multiplied by the total allowable hospital CHAMPUS charges equals the estimated professional fees to be added into the buy equation.

To estimate the CHAMPUS patient cost-shares the FY 1995 total patient cost-shares paid minus the total OB patient cost-shares will be calculated to provide a revised total patient cost-share amount. The total admissions minus the OB admissions provides a revised total number of admissions. The revised total patient cost-share divided by the revised total admissions provides an average patient cost-share per admission with OB factored out of the equation. Multiplying this average patient cost-share figure by the total number of admissions at RWBACH provides an

estimated total patient cost-share amount if the inpatient services are provided elsewhere. The interim buy equation result minus the estimated patient cost-share amount will then provide the final buy equation cost.

#### Make Equation

The make estimation of costs involves determining the government's cost of providing inpatient services using MEPRS data. The process of analyzing the MEPRS data includes determining the relevant costs to provide inpatient services. The department level cost report will be used to identify direct and indirect costs and appropriate percentages will be used to allocate the portion of the costs applicable to the inpatient service (Watkins 1995). These costs will be verified wherever possible to add validity. The MEPRS report for inpatient services provides the initial make equation cost of providing the inpatient services. The adjustment to this report is to decrement the fixed cost component attributed to inpatient services that will not go away if the inpatient services are provided elsewhere. To determine this fixed cost component, the initial MEPRS inpatient cost will be adjusted by subtracting an estimated inpatient salary component and subtracting an estimated other direct and indirect cost component attributed to inpatient services.

The fixed cost component includes numerous costs assigned by MEPRS to the inpatient service which will not go away with the elimination of inpatient services in the facility. This includes such items as: 1) portions of administrative personnel salaries assigned through the stepdown process to inpatient services such as the hospital commander; 2) depreciation, utilities,

maintenance and housekeeping costs for that part of the facility; 3) security and groundskeeping costs for the facility; equipment costs which were stepped down to inpatient services based on workload figures because the equipment will still be used in the facility such as the ultrasound machine, and 4) contracts for equipment and services which were also stepped down based on workload such as pharmacy machines and the radiologists' salaries.

Determining the contribution of the inpatient personnel component to the MEPRS inpatient total will be made using the Medical Command (MEDCOM) Manpower Assessment Model to assess possible staffing reductions. The model was run in 1994 by a visiting MEDCOM team of experts depicting data during FY 1994, then rerun withdrawing inpatient workload, except same day surgery, to provide comparison data. Based on the 1994 model results, a complete line-by-line review of the 1995 RWBACH Table of Distribution and Allowances (TDA) personnel authorization document will be made to update the model results and review possible staffing reductions considering that a small nursing staff will have to remain in place to support the SDS workload.

There are several variances from the 1994 study to be corrected or updated for this study. First, three of the positions the model results recommended deleting from the TDA have already been deleted from the 1995 TDA, thus these are not included as possible savings. Second, six positions have been identified for deletion from the TDA within the next six months; therefore, these positions are not included in this study as well. Third, twelve positions identified by the study for deletion based on workload changes are vacant. Since these positions are currently vacant it would be misleading to count these positions as financial savings; therefore, these are

not included in this study. Fourth, based on the line-by-line review of the model results, an additional four, currently filled, positions have been identified that can be deleted based on the inpatient workload shift. The civilian salaries in the model were based on a GS step 5 salary and the WG/WS/WL on a step 4 pay. The FY 1994 pay scale was used in the model for the base salary with 33 percent added for benefits. Military salaries used in the model were based on MEDCOM pay tables. The fifth and final adjustment is to update the personnel costs to adjust for pay increases from FY 1994 to FY 1995. The military base pay raise of 2 percent and the civilian raise of 3.09 percent are multiplied by model figures to reach the revised salaries for this study. The list of TDA positions dedicated to inpatient care and the savings projected by the elimination of inpatient services are provided by Appendix 4.

The portion of the FY 1995 inpatient MEPRS costs that can be determined as the direct and indirect savings component if the inpatient services are provided elsewhere also serves as a component of the MEPRS inpatient total. The review of the MEPRS costs that may be saved for the purposes of this study will be determined through a careful review of the MEPRS reports, at Appendix 5, with the guidance of the RWBACH Decision Information Support Center staff. The MEPRS inpatient expense minus the inpatient salary component and minus the other direct and indirect inpatient cost component leaves the fixed cost component which MEPRS assigns to the inpatient work center. The final make equation is then determined by subtracting the inpatient service fixed cost component from the total MEPRS inpatient expense.

The next important step in the study is to discuss the scenario with representatives from the Sierra Vista Community Hospital. Currently there is an agreement in place granting a 10

percent discount off the CHAMPUS allowable DRG rate. If the intention would be to continue to allow a CHAMPUS discount, the discount would be applied during the make versus buy computations. A make versus buy determination based on the FY 1995 inpatient experience can now be accomplished.

The reliability and validity of the study is dependent upon the accuracy of the MEPRS data. The reliability concerns the amount of error in the measurement process. In this study, since the sample was the population, the results accurately represent the population parameters being studied. A measure is reliable only to the degree that it supplies consistent results and the results are only as reliable as the data input allows (Emory 1985). The reliability of the study is concerned with the degree of confidence in which measurements taken were error-free. The reliability of the MEPRS data at RWBACH is believed to more accurate than average due to the extensive initial and on-going training provided to all data collection personnel. The validity of the CHAMPUS system is based in law and set forth in the CHAMPUS policy manual. There are no ethical concerns with this study since no individuals are personally identified nor tested.

#### Limitations of the Study

There is one primary limitation in this study. The impact of the TRICARE program cannot be estimated prior to the FY 1997 implementation of TRICARE in this region. To be properly addressed the TRICARE Bid Price Adjustment for the dramatic change in workload from the MTF to the contractor would have to be calculated and included in the make versus buy equation.

## CHAPTER III

### RESULTS

#### Buy Equation

The initial buy equation amount is derived from the total CHAMPUS charges for all 590 inpatient cases provided at RWBACH during FY 1995 depicted at Appendix 3. The total hospital CHAMPUS charge to the government, if this care was provided downtown would be \$1,904,103. This amount will then be adjusted as presented earlier in this study.

The estimated CHAMPUS professional fees for the RWBACH inpatient workload are calculated using the actual hospital CHAMPUS expenses from the CHAMPUS Health Care Summary by Primary Diagnosis report for FY 1995 at Appendix 6 using a four step process. Step one is to take the total OB hospital cost of inpatient care provided downtown, \$523,598, subtracted from the total hospital government cost of inpatient care provided downtown, \$3,007,186, to leave a revised actual downtown hospital inpatient cost of \$2,483,588 with OB factored out (\$3,007,186 - 523,598). Step two is to take the total OB professional cost paid for inpatient care downtown, \$968,046, subtracted from the total government professional cost paid for inpatient care downtown of \$1,547,004 to leave a revised downtown inpatient professional cost of \$578,958 with OB factored out (\$1,547,004 - 968,046). Step three is dividing these revised professional costs by the revised hospital cost (\$578,958 divided by \$2,483,588) which produces a multiplier of .23311 that will be used to estimate the professional fees required to transfer RWBACH's current inpatient workload downtown. The fourth and final step involves

multiplying the total allowable hospital CHAMPUS charges applied to current RWBACH inpatient procedures by this multiplier to produce the final estimated professional costs to perform the RWBACH workload downtown of \$443,865 (\$1,904,103 multiplied by .23311).

The four step process to estimate professional fees is shown as follows:

1)	Total Government Hospital Cost	\$3,007,186
	<u>- Total OB Hospital Cost</u>	<u>- 523,598</u>
	Equals the Revised Total Hospital Cost	\$2,483,588
2)	Total Government Professional Cost	\$1,547,004
	<u>- Total OB Professional Cost</u>	<u>- 968,046</u>
	Equals the Revised Total Professional Cost	\$ 578,958
3)	Revised Professional Cost	\$ 578,958
	<u>÷ Revised Hospital Cost</u>	<u>÷2,483,588</u>
	Equals the Professional Fee Estimate Multiplier	.23311
4)	Total Hospital CHAMPUS Charge for RWBACH	\$1,904,103
	<u>× Professional Fee Estimate Multiplier</u>	<u>× .23311</u>
	Equals the Final Estimated Professional Fees	\$ 443,865

The calculation of the patient cost-share involves a similar four step process. Step one uses the CHAMPUS Health Care Summary by Primary Diagnosis data for FY 1995, attached at Appendix 6, which indicates that the actual patient cost-shares paid for inpatient care downtown equaled \$532,213 and the OB portion of these cost-shares totaled \$41,718. The difference between these totals, \$490,495, is the patient cost-shares paid for inpatient care downtown with OB factored out (\$532,213 - 41,718). Step two takes the total admissions downtown, 1201, minus the OB admissions downtown, 405, leaving 796 admissions downtown with OB factored

out (1201 - 405). Step three involves taking the revised patient cost-share with OB factored out for care rendered downtown, \$490,495, divided by the revised admissions downtown, 796, which provides an average cost-share per admission downtown of \$616.20 with OB factored out. The fourth step uses this average cost-share per admission downtown multiplied by the actual number of inpatient admissions at RWBACH thus providing an estimated patient cost-share of \$363,558 for RWBACH's inpatient workload had the care been rendered downtown (\$616.20 multiplied by 590). This four step process to estimate the patient cost-shares is shown as follows:

1)	Total Patient Cost-Shares	\$ 532,213
	<u>- Total OB Patient Cost-Shares</u>	<u>- 41,718</u>
	Equals the Revised Total Patient Cost-Share	\$ 490,495
2)	Total Admissions	1,201
	<u>- Total OB Admissions</u>	<u>- 405</u>
	Equals the Revised Total Admissions	796
3)	Revised Total Patient Cost-Share	\$ 490,495
	<u>÷ Revised Total Admissions</u>	<u>÷ 796</u>
	Equals the Average Cost-Share per Admission	\$ 616.20
4)	Average Cost-Share Per Admission	\$ 616.20
	<u>x Number of RWBACH Inpatient Admissions</u>	<u>x 590</u>
	Equals the Final Estimated Patient Cost-Share	\$ 363,558

The computation for professional fees and patient cost-shares are used to modify the computed RWBACH FY 1995 inpatient CHAMPUS charge of \$1,904,103 (Appendix 3). The first modification is the addition of the CHAMPUS professional fees which totaled \$443,865. The resulting sum is \$2,347,968 (\$1,904,103 + \$443,865). The second modification is the deduction for patient cost-shares totaling \$363,558. The difference is \$1,984,410 (\$2,347,968 -

\$363,558). The final buy equation without a discount for the 590 inpatient cases at RWBACH for FY 1995 came to \$1,984,410. The equation is as follows:

Total CHAMPUS Allowable Charge (no discount):	\$1,904,103
Plus: CHAMPUS Professional Fees	+\$ 443,865
Less: Patient Cost-Shares:	<u>-\$ 363,558</u>
Equals: FY 1995 Total Cost to Buy 590 Inpatient Services at Sierra Vista Community Hospital	\$1,984,410

#### Make Equation

The RWBACH FY 1995 total inpatient expenses, according to MEPRS, was \$5,468,747 (Appendix 5). The adjustments to this amount include subtracting the estimated inpatient salary cost component and the direct and indirect cost component attributed to the inpatient service to arrive at an estimated fixed cost component assigned by MEPRS to the inpatient service as presented earlier in this study.

Reviewing the inpatient salary costs there are 26 civilian positions totaling \$987,674 and 33 military positions totaling \$1,141,080 in salaries cut for the purposes of this study. The total inpatient personnel contribution to inpatient MEPRS expense is \$2,128,754 (Appendix 4). The total inpatient expenses less the inpatient salary component provides an interim total of \$3,339,993 (\$5,468,747 - 2,128,754).

The next step is to determine all the other costs of providing inpatient services that would be avoided if the inpatient services were provided elsewhere. These component costs include: the direct and indirect supply and equipment costs of inpatient services; the indirect supply, equipment and contract costs for food services; the direct contract reductions for linen and cable

television services; and the temporary duty training expenses related to providing inpatient services. The MEPRS provides separate calculations for each of these expense categories which are included in Appendix 5. The 25 percent reduction in linen contract costs created by the deletion of inpatient services is based on an informed estimate by the Logistics Officer. The 14 percent reduction in contracted cable television outlets required is due to the elimination of inpatient services is based on an informed estimate by the Chief, Information Management Officer. Utilizing the MEPRS reports the actual amounts attributable to this component of inpatient services totals \$1,487,100, which is depicted on the MEPRS summation sheet at Appendix 5. Subtracting this from the adjusted total presented in the previous paragraph leaves a total of \$1,852,893 (\$3,339,993 - \$1,487,100). This remainder is the amount of MEPRS costs that can be directly attributed to fixed costs assigned by MEPRS to the inpatient service that would remain if the inpatient services were provided elsewhere. Therefore the final make equation totals \$3,465,140 (\$5,468,747 - 1,852,893). The final make equation provides the amount of the federal appropriations for FY 1995 required to provide the 590 inpatient services at RWBACH. This total amount was \$3,465,140 which breaks down as follows:

Total MEPRS Inpatient Expense	\$5,468,747
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Total MEPRS Inpatient Expense	\$5,468,747
Less Inpatient Salary Savings	-\$2,128,754
Less Other MEPRS Savings	<u>-\$1,487,100</u>
Equals MEPRS Fixed Costs	\$1,852,893

Less MEPRS Fixed Costs	<u>-\$1,852,893</u>
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Equals: The Revised Federal Appropriation for RWBACH \$3,465,140  
For FY 1995 to Provide 590 Inpatient Services

Buy/Make Results

The study shows a cost savings of \$1,480,730, a 43 percent difference, between make and buy which could be made, with no discount, by contracting for inpatient services at Sierra Vista Community Hospital. As previously presented RWBACH currently has an agreement in place with provides a 10 percent discount off the CHAMPUS allowable DRG rate. The possibility of continuing the 10 percent discount was discussed with the CEO and COO of Sierra Vista Community Hospital. These individuals felt this agreement was fair to both parties and the current agreement could be continued even if the changes proposed by this study were to occur. For the purposes of this study Table 1 was developed which depicts several alternative discounts from the CHAMPUS allowable DRG rate and the resulting impact. The table depicts several different CHAMPUS discount scenarios for analysis purposes. The table begins with a column depicting the make equation with no discount as just presented and goes on to depict the results of the make equation with discounts ranging from 5 to 25 percent. The deductions to the equation for professional fees and patient cost-shares would remain unchanged regardless of the CHAMPUS discount the Sierra Vista Community Hospital provides for inpatient services.

The agreed upon 10 percent discount would increase the differential to \$1,671,140, or 48 percent, over the cost of providing the inpatient services at RWBACH.

Analyzing the table results further shows a 15 percent discount off the CHAMPUS allowable DRG rate would result in cost savings of \$1,766,345, or a 51 percent savings. The 20 percent discount results in a cost savings of \$1,861,551, or a 54 percent savings. The 25 percent discount results in a cost savings of \$1,956,756, or a 56 percent savings.

Table 1.  
Alternate CHAMPUS Allowable DRG Rate Discounts  
RWBACH FY 1995

	No Discount	5% Discount	10% Discount	15% Discount	20% Discount	25% Discount
<b>Inpatient CHAMPUS Charge</b>	\$1,904,103	\$1,808,898	\$1,713,693	\$1,618,488	\$1,523,282	\$1,428,077
<b>+ CHAMPUS Professional Fees</b>	\$443,865	\$443,865	\$443,865	\$443,865	\$443,865	\$443,865
<b>- Patient Cost-Shares</b>	\$363,558	\$363,558	\$363,558	\$363,558	\$363,558	\$363,558
<b>Final Buy Equation Price</b>	\$1,984,410	\$1,889,205	\$1,794,000	\$1,698,795	\$1,603,589	\$1,508,384
<b>Final Make Equation Price</b>	\$3,465,140	\$3,465,140	\$3,465,140	\$3,465,140	\$3,465,140	\$3,465,140
<b>Difference</b>	\$1,480,730	\$1,575,935	\$1,671,140	\$1,766,345	\$1,861,551	\$1,956,756
<b>% Difference</b>	43%	45%	48%	51%	54%	56%

## CHAPTER IV

## DISCUSSION

Over the years several GAO and DoD reports have indicated the financial advantage enjoyed by MTFs has been slowly eroding away. The financial advantage in 1994 showed the military's direct care system to have a 1 or 2 percent edge over CHAMPUS, significantly down from the 44 percent thought in 1985. As healthcare progresses more and more into the managed care arena that advantage may finally erode away completely. As discussed previously MTF Commanders can no longer take a reactive approach in managing their dwindling resources. The results of this report indicate that the financial advantage over CHAMPUS has not only gone away, but that the pendulum may have, in fact, swung the other direction.

The 1994 study by Rogers, cited previously, found similar results for Wilford Hall Medical Center and called for a more effective cost finding/cost accounting system to allow MTF Commanders the ability to probe into their cost centers and determine where the opportunities for improvement exist. The MEPRS does not provide the latitude for such an examination and should be revised or replaced with a more effective system for this reason. The consistency of results, as found in this and in the Rogers' report lends credence to the immediate need for improvements in the inpatient healthcare system before drastic changes are made at much higher echelons which will force the closure or privatization of such services. The impending TRICARE contract for this facility will force many changes, hopefully, most of which will be towards more cost-effective means of delivering healthcare. The TRICARE plan is expected to

be more cost-effective than the current CHAMPUS or MTF method of delivering healthcare, which will only serve to add even more pressure on MTF Commanders to reduce the cost of providing healthcare services. The MTF Commander must be proactive and creative to survive in this competitive environment. In order to be successful MTF Commanders must have the proper tools at their disposal. Some of the critical tools needed will include a more responsive cost accounting system and highly sophisticated utilization management program. The proactive MTF Commander will realize if these critical tools are not going to be provided to them, they must seek them out.

## CHAPTER V

### CONCLUSIONS AND RECOMMENDATIONS

The results of this study indicate it is no longer cost-effective to continue providing inpatient services at Raymond W. Bliss Army Community Hospital. The social and political ramifications of such a decision would be overwhelming in such a small, rural population center. The installation and the large retiree population would create an immediate and very vocal negative response to such a decision. It is for this reason that the MTF Commander must immediately seek creative solutions to this problem.

Internally, the MTF Commander should begin a work center analysis to determine which inpatient work centers are not cost-effective and immediately reverse this. This study was limited to only inpatient services, as a whole, but in researching the individual cost centers such limitations are not advised. The entire healthcare delivery system must be reviewed and areas for improvement identified and plans made to immediately begin to rectify the problem. These areas must be turned around before the TRICARE contract starts in February 1997, or the problems will magnify as the contractor profits from the MTF's problems.

The increasingly competitive environment will also force small MTFs, such as RWBACH, to look for assistance with impending threats to their survival. The MTF Commander should look to the Regional Commander for assistance in obtaining a better cost accounting system for the region due to the large financial outlay such a purchase will require. The Regional Commander could very easily research and purchase a system for use within the

entire region. This same approach can and should be taken for the issue of Utilization Management. These two areas are only the tip of the iceberg as far as possible economies of scale the region could provide for its smaller MTFs.

The results of this study clearly depict the cost savings that could be made by contracting for inpatient services with Sierra Vista Community Hospital. A decision to move inpatient services to Sierra Vista Community Hospital in effects vests the facility with inpatient monopoly status. Sierra Vista Community Hospital currently qualifies by federal standards as a small, isolated rural facility and therefore would be allowed to bill charges instead of their current method of billing by DRG if their management desired to. The CEO made the decision several years ago in order to procure the OB workload from the MTF to bill by DRGs. If the MTF chooses, or is forced, to close its inpatient services the CEO could easily change to billed charges. This would not only dramatically increase the cost of contracting for inpatient services, but also significantly increase the CHAMPUS cost for the 824 inpatient cases already provided at Sierra Vista Community Hospital. This shift to billed charges would also increase the patient cost-shares. Further study should be made into the financial costs of all workload currently done at Sierra Vista Community Hospital, as well as the increased inpatient workload, coming under billed charges rather than DRG rates prior to making the decision to close inpatient services at Raymond W. Bliss Army Community Hospital.

## DEFINITIONS

Capitation - The per capita payment for providing a specific menu of health services to a defined population over a set period of time.

Catchment area - A forty mile radius which encircles a military treatment facility for which the hospital commander is responsible.

Civilian Health and Medical Program of the Uniformed Services - CHAMPUS is the comprehensive health insurance program offered by the Department of Defense to military family members, military retirees and their family members and other designated members of the Department of Defense.

Copayment - A payment made by an enrollee at the time that selected medical services are rendered.

Deductible - The part of a person's health care expenses the individual must pay for before coverage from the insurer begins.

Diagnostic Related Groups - A classification system using major diagnostic categories based on the International Classification of Diseases-9 codes developed at Yale University.

Fee-For-Service - A plan where the patient is charged according to a fee schedule set for each service and/or procedure provided.

Health Maintenance Organization - An organization of health care personnel and facilities that provides a comprehensive range of health services to an enrolled population for a fixed sum of money paid in advance for a specified period of time.

Managed Care - A planned and coordinated health delivery system which attempts to provide the highest quality and lowest cost healthcare to patients by influencing the behaviors of providers through incentives, penalties and practice monitoring.

Military/Civilian Health Services Partnership Program - federal legislation which allows private healthcare providers to provide healthcare to eligible CHAMPUS beneficiaries within military treatment facilities. Providers agree to discounted reimbursements and bill CHAMPUS directly for healthcare rendered, rather than billing the patients.

Per Member Per Month - This refers to the cost or revenue from each plan's member for one month.

Preferred Provider Organization - A group of physicians and/or hospitals who contract with an employer to provide services to their employees. The patient has the choice of seeing a preferred provider in the organization at a discounted rate or going outside the organization and paying for the increased costs of medical care.

Utilization Review - This is a systematic evaluation of the necessity, appropriateness and efficiency of the use of health care services, procedures and facilities. It includes prospective (prior to admission), concurrent (while care is provided), and retrospective (after care is provided) reviews and evaluations.

## **APPENDIX 1**

### **Inpatients by DRG in Tucson/Sierra Vista Facilities**

Inpatients by DRG in Tucson/Sierra Vista Facilities

El Dorado Hospital (Tucson, AZ)

DRG	Description	Institutional Charges				Professional Charges			
		Cases	Govt Pay	Oth Hlth Ins	Pmt	Govt Pay	Oth Hlth Ins	Pmt	Govt Pay
004	SPINAL PROCEDURES	1	\$716	\$1,825	\$1,825	\$0	\$33	\$11	\$11
124	CIRCULATORY DISORDERS EXC AMI, WITH CARD CATH & COM	1	\$2,370	\$0	\$1,938	\$4,291	\$0	\$0	\$1,580
150	PERITONEAL ADHESIOLYSIS WITH CC	1	\$6,096	\$0	\$1,292	\$5,444	\$0	\$0	\$3,180
124	CIRCULATORY DISORDERS EXC AMI, WITH CARD CATH & COM	1	\$3,016	\$0	\$1,292	\$1,446	\$0	\$0	\$482
		4	\$12,197	\$1,825	\$6,347	\$11,181	\$33	\$33	\$5,254

Tucson Medical Center (Tucson, AZ)

DRG	Institutional Charges			Professional Charges			
	Cases	Govt Pay	Oth Hlth Ins	Pmt	Govt Pay	Oth Hlth Ins	Pmt
000	15	\$74,511	\$4,548	\$17,497	\$15,487	\$823	\$4,278
009	1	\$12,401	\$0	\$594	\$3,532	\$0	\$1,330
014	1	\$1,559	\$0	\$323	\$4,934	\$0	\$1,749
024	1	\$1,974	\$0	\$1,292	\$579	\$0	\$231
026	1	\$1,782	\$0	\$0	\$101	\$0	\$0
027	1	\$6,323	\$0	\$25	\$591	\$0	\$278
052	1	\$2,220	\$0	\$25	\$1,777	\$0	\$0
088	1	\$2,869	\$0	\$969	\$191	\$0	\$64
098	1	\$1,728	\$0	\$38	\$452	\$0	\$0
144	1	\$29,006	\$0	\$6,492	\$9,113	\$0	\$962
171	1	\$3,476	\$0	\$47	\$2,702	\$0	\$154
180	1	\$3,181	\$0	\$0	\$1,940	\$0	\$14
184	2	\$1,951	\$0	\$50	\$163	\$0	\$130
190	1	\$1,355	\$0	\$25	\$253	\$0	\$0
206	1	\$2,223	\$0	\$40	\$514	\$0	\$0
215	1	\$3,377	\$0	\$813	\$4,087	\$0	\$1,362
245	1	\$2,221	\$0	\$1,274	\$189	\$0	\$63
265	1	\$2,408	\$0	\$323	\$126	\$0	\$42
358	1	\$2,598	\$0	\$1,292	\$1,565	\$0	\$692
370	1	\$3,236	\$0	\$33	\$2,568	\$0	\$0
371	1	\$9,874	\$0	\$214	\$2,353	\$0	\$0
372	1	\$1,811	\$0	\$22	\$1,323	\$0	\$0
373	2	\$2,517	\$0	\$50	\$2,090	\$0	\$0
379	1	\$5,382	\$0	\$270	\$2,249	\$0	\$148
391	2	\$744	\$0	\$0	\$86	\$0	\$0
394	1	\$2,707	\$0	\$25	\$424	\$0	\$0
451	1	\$1,056	\$0	\$323	\$0	\$0	\$0
453	1	\$1,409	\$0	\$25	\$3,207	\$0	\$4
475	2	\$29,465	\$0	\$1,986	\$1,553	\$0	\$116
	47	\$215,366	\$4,548	\$34,065	\$64,151	\$823	\$11,616

Sierra Vista Community Hospital (Sierra Vista, AZ)

DRG	Cases	Institutional Charges			Professional Charges		
		Govt Pay	Oth Hlth Ins	Pmt	Govt Pay	Oth Hlth Ins	Pmt
000	28	\$61,711	\$0	\$450	\$26,295	\$0	\$50
012	1	\$3,857	\$0	\$609	\$588	\$0	\$258
070	1	\$0	\$2,396	\$1,169	\$0	\$0	\$0
079	1	\$0	\$17,344	\$5,888	\$258	\$629	\$389
088	1	\$0	\$8,039	\$3,195	\$0	\$0	\$0
090	1	\$800	\$0	\$1,383	\$1,311	\$0	\$364
095	1	\$1,654	\$0	\$25	\$412	\$0	\$64
097	2	\$804	\$1,544	\$1,450	\$137	\$0	\$46
127	1	\$716	\$2,574	\$2,574	\$26	\$276	\$214
130	2	\$0	\$16,355	\$6,610	\$294	\$1,017	\$615
138	1	\$398	\$0	\$323	\$3,832	\$0	\$1,427
140	7	\$4,997	\$2,465	\$7,205	\$3,153	\$127	\$1,182
143	5	\$4,347	\$6,949	\$2,924	\$1,791	\$5	\$746
149	1	\$2,033	\$0	\$2,829	\$1,481	\$0	\$494
150	1	\$4,339	\$0	\$2,310	\$466	\$0	\$135
45	1	\$1,509	\$0	\$29	\$1,105	\$0	\$0
158	1	\$568	\$0	\$25	\$2,702	\$0	\$154
180	1	\$0	\$0	\$3,900	\$1,529	\$0	\$614
182	2	\$0	\$0	\$773	\$1,833	\$0	\$286
183	3	\$3,563	\$0	\$9,374	\$5,602	\$213	\$1,546
202	1	\$0	\$0	\$2,347	\$335	\$0	\$218
204	1	\$1,214	\$0	\$25	\$1,394	\$0	\$0
206	1	\$1,457	\$0	\$10,450	\$183	\$0	\$2,717
209	5	\$25,756	\$7,377	\$13,938	\$10,626	\$1,671	\$1,098
210	1	\$5,555	\$0	\$4,397	\$150	\$2,025	\$1,219
211	1	\$0	\$6,016	\$0	\$1,006	\$3,467	\$432
215	2	\$5,956	\$0	\$646	\$998	\$0	\$483
219	1	\$2,308	\$0	\$186	\$754	\$0	\$0
235	1	\$2,917	\$0	\$1,818	\$2,427	\$18	\$164
277	1	\$160	\$0	\$29	\$371	\$0	\$17
278	1	\$1,612	\$0	\$3,257	\$486	\$0	\$162
294	2	\$976	\$1,180	\$1,064	\$2,261	\$1,377	\$459
300	1	\$0	\$2,118	\$1,636	\$332	\$0	\$118
321	1	\$0	\$0	\$0	\$0	\$72	

323	URINARY STONES WITH CC. AND /OR ESW LITHOTRIPSY	2	\$3,162	\$0	\$715	\$2,085	\$726
358	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY WITH CC	2	\$3,191	\$9,228	\$3,286	\$2,288	\$1,550
359	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W/O CC	11	\$19,875	\$14,158	\$4,989	\$23,171	\$1,115
361	LAPAROSCOPY & INCISIONAL TUBAL INTERRUPTION	1	\$0	\$0	\$2,337	\$1,727	\$576
370	CESAREAN SECTION WITH CC	9	\$23,876	\$0	\$1,006	\$21,385	\$687
371	CESAREAN SECTION W/O CC	42	\$81,856	\$4,348	\$6,225	\$89,461	\$3,029
372	VAGINAL DELIVERY WITH COMPLICATING DIAGNOSES	13	\$17,422	\$0	\$300	\$17,992	\$0
373	VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES	249	\$244,926	\$6,382	\$16,127	\$336,812	\$8,984
374	VAGINAL DELIVERY WITH STERILIZATION AND/OR D&C	8	\$14,370	\$0	\$200	\$17,509	\$0
376	POSTPARTUM AND POST ABORTION DIAGNOSES W/O O.R. PR	4	\$4,178	\$0	\$232	\$1,834	\$388
378	ECTOPIC PREGNANCY	1	\$1,991	\$0	\$25	\$636	\$110
379	THREATENED ABORTION	7	\$9,723	\$0	\$410	\$2,261	\$0
383	OTHER ANTEPARTUM DIAGNOSES WITH MEDICAL COMPLICATI	9	\$8,615	\$0	\$737	\$1,521	\$0
384	OTHER ANTEPARTUM DIAGNOSES W/O MEDICAL COMPLICATI	2	\$1,953	\$0	\$90	\$595	\$0
391	NORMAL NEWBORN	370	\$111,776	\$0	\$482	\$70,889	\$1,041
415	O.R. PROCEDURE FOR INFECTIOUS & PARASITIC DISEASES	1	\$9,426	\$0	\$48	\$954	\$0
418	POSTOPERATIVE & POST-TRAUMATIC INFECTIONS	1	\$2,879	\$0	\$13	\$184	\$0
450	POISONING AND TOXIC EFFECTS OF DRUGS AGE >17 W/O CC	2	\$1,276	\$2,149	\$1,326	\$108	\$235
451	POISONING AND TOXIC EFFECTS OF DRUGS AGE 0-17	2	\$1,120	\$3,043	\$1,177	\$308	\$0
452	COMPLICATIONS OF TREATMENT WITH CC	1	\$1,389	\$0	\$323	\$32	\$11
453	COMPLICATIONS OF TREATMENT W/O CC	1	\$675	\$0	\$579	\$22	\$7
461	O.R. PROC W DIAGNOSES OF OTHER CONTACT WITH HEALTH	2	\$8,187	\$0	\$50	\$4,184	\$0
467	OTHER FACTORS INFLUENCING HEALTH STATUS	3	\$3,620	\$0	\$75	\$3,208	\$60
494	LAPROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W/O CC	1	\$0	\$9,171	\$2,859	\$130	\$390
		825	\$715,756	\$134,031	\$126,662	\$668,526	\$34,555

Desert Hills (Tucson, AZ)

DRG	Institutional Charges			Professional Charges			
	Cases	Govt Pay	Oth Hlth Ins	Pmt	Govt Pay	Oth Hlth Ins	Pmt
000	27	\$121,867	\$0	\$11,653	\$395	\$0	\$15

St. Mary's Hospital (Tucson, AZ)

DRG	Institutional Charges			Professional Charges			
	Cases	Govt Pay	Oth Hlth Ins	Pmt	Govt Pay	Oth Hlth Ins	Pmt
009	1	\$5,580	\$0	\$0	\$0	\$0	\$0
124	1	\$0	\$4,371	\$1,346	\$372	\$7,224	\$5,813
125	1	\$0	\$4,185	\$2,868	\$0	\$0	\$0
130	1	\$1,411	\$0	\$2,261	\$91	\$0	\$0
143	1	\$1,280	\$0	\$323	\$512	\$0	\$179
209	1	\$0	\$28,404	\$8,721	\$179	\$761	\$726
216	1	\$6,359	\$0	\$0	\$3,139	\$0	\$538
47	1	\$4,626	\$0	\$542	\$1,830	\$0	\$1,801
218	1	\$0	\$0	\$1,618	\$3,709	\$0	\$254
264	1	\$2,086	\$0	\$0	\$2,967	\$0	\$1,436
335	1	\$0	\$15,159	\$4,857	\$0	\$0	\$0
371	1	\$2,355	\$0	\$38	\$1,056	\$0	\$52
415	1	\$9,509	\$0	\$1,897	\$1,132	\$0	\$377
443	1	\$2,571	\$0	\$25	\$308	\$0	\$0
449	1	\$2,282	\$0	\$25	\$496	\$0	\$119
	14	\$38,059	\$52,120	\$24,521	\$12,823	\$10,952	\$11,295

University Medical Center (Tucson, AZ)

DRG	Institutional Charges						Professional Charges						
	Cases	Govt Pay	Oth Hlth Ins	Pmt Payment	Govt Pay	Oth Hlth Ins	Pmt Payment	Govt Pay	Oth Hlth Ins	Pmt Payment	Govt Pay	Oth Hlth Ins	Pmt Payment
000	7	\$67,294	\$4,172	\$3,149	\$5,850	\$3,847	\$0	\$654	\$0	\$604	\$0	\$1,282	\$0
001	2	\$31,593	\$0	\$2,584	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
003	1	\$0	\$26,516	\$11,512	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
005	1	\$0	\$17,803	\$7,046	\$253	\$2,561	\$0	\$2,561	\$0	\$2,118	\$0	\$861	\$0
009	2	\$15,344	\$0	\$3,846	\$2,040	\$0	\$0	\$0	\$0	\$0	\$0	\$189	\$0
014	1	\$5,513	\$0	\$1,292	\$567	\$0	\$0	\$0	\$0	\$0	\$0	\$72	\$0
015	1	\$1,928	\$0	\$1,506	\$1,268	\$0	\$0	\$0	\$0	\$0	\$0	\$169	\$0
020	1	\$6,567	\$0	\$2,045	\$507	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
023	1	\$0	\$11,343	\$3,931	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
029	1	\$3,997	\$0	\$25	\$1,406	\$0	\$0	\$0	\$0	\$0	\$0	\$365	\$0
030	1	\$1,524	\$0	\$646	\$1,372	\$0	\$0	\$0	\$0	\$0	\$0	\$457	\$0
035	1	\$2,801	\$0	\$25	\$162	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
060	1	\$1,790	\$0	\$25	\$352	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
066	1	\$1,466	\$0	\$240	\$196	\$0	\$0	\$0	\$0	\$0	\$0	\$65	\$0
071	1	\$1,284	\$0	\$25	\$120	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
074	1	\$1,646	\$0	\$28	\$783	\$0	\$0	\$0	\$0	\$0	\$0	\$55	\$0
075	1	\$0	\$30,908	\$12,848	\$444	\$4,456	\$0	\$0	\$0	\$0	\$0	\$3,656	\$0
082	3	\$10,635	\$8,212	\$8,779	\$2,940	\$1,288	\$0	\$0	\$0	\$0	\$0	\$829	\$0
088	2	\$0	\$19,651	\$9,772	\$0	\$43	\$0	\$0	\$0	\$0	\$0	\$29	\$0
091	2	\$4,074	\$0	\$53	\$244	\$0	\$0	\$0	\$0	\$0	\$0	\$148	\$0
096	1	\$3,388	\$0	\$646	\$558	\$0	\$0	\$0	\$0	\$0	\$0	\$138	\$0
097	3	\$3,812	\$0	\$3,255	\$512	\$0	\$0	\$0	\$0	\$0	\$0	\$151	\$0
098	10	\$20,294	\$0	\$264	\$1,401	\$0	\$0	\$0	\$0	\$0	\$0	\$488	\$0
100	1	\$2,347	\$0	\$19	\$133	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
101	1	\$2,403	\$0	\$10	\$242	\$0	\$0	\$0	\$0	\$0	\$0	\$60	\$0
124	4	\$12,332	\$6,162	\$9,230	\$1,833	\$1,563	\$0	\$0	\$0	\$0	\$0	\$1,922	\$0
125	4	\$11,632	\$4,373	\$5,113	\$3,413	\$2,023	\$0	\$0	\$0	\$0	\$0	\$1,871	\$0
129	1	\$6,582	\$0	\$323	\$1,294	\$0	\$0	\$0	\$0	\$0	\$0	\$431	\$0
138	1	\$2,482	\$0	\$646	\$255	\$0	\$0	\$0	\$0	\$0	\$0	\$85	\$0
140	1	\$2,037	\$0	\$323	\$181	\$0	\$0	\$0	\$0	\$0	\$0	\$211	\$0
143	3	\$5,933	\$0	\$684	\$615	\$0	\$0	\$0	\$0	\$0	\$0	\$83	\$0
144	2	\$9,901	\$0	\$114	\$5,401	\$0	\$0	\$0	\$0	\$0	\$0	\$127	\$0
163	1	\$2,588	\$0	\$25	\$2,018	\$0	\$0	\$0	\$0	\$0	\$0	\$26	\$0
174	3	\$7,596	\$1,799	\$2,870	\$1,167	\$718	\$0	\$0	\$0	\$0	\$0	\$944	\$0

193	BILARY TRACT PROC W CC EXCEPT ONLY CHOLECYST W OR	1	\$13,804	\$0	\$1,897	\$1,979	\$0	\$660
205	DISORDERS OF LIVER EXC MALIG, CIRR, ALC HEPA WITH CC	1	\$716	\$5,546	\$5,546	\$0	\$1,068	\$1,068
208	DISORDERS OF THE BILIARY TRACT W/O CC	1	\$2,459	\$0	\$25	\$1,216	\$0	\$0
210	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 WI	1	\$10,633	\$0	\$25	\$2,324	\$0	\$0
212	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE 0-17	1	\$3,432	\$0	\$25	\$2,327	\$0	\$0
215	BACK & NECK PROCEDURES W/O CC	1	\$3,441	\$0	\$0	\$3,961	\$0	\$0
247	SIGNS & SYMPTOMS OF MUSCULOSKELETAL SYSTEM & CONN	1	\$876	\$0	\$1,938	\$409	\$0	\$136
266	SKIN GRAFT &/OR DEBRID EXC FOR SKIN ULCER OR CELLULITI	1	\$3,070	\$0	\$323	\$0	\$0	\$0
277	CELLULITIS AGE >17 WITH CC	1	\$3,927	\$0	\$0	\$0	\$0	\$0
290	THYROID PROCEDURES	1	\$0	\$8,545	\$3,378	\$224	\$1,392	\$1,041
295	DIABETES AGE 0-35	1	\$2,639	\$0	\$25	\$203	\$0	\$0
298	NUTRITIONAL & MISC METABOLIC DISORDERS AGE 0-17	5	\$6,207	\$0	\$668	\$2,868	\$0	\$81
310	TRANSURETHRAL PROCEDURES WITH CC	1	\$0	\$4,803	\$4,444	\$0	\$629	\$387
313	URETHRAL PROCEDURES, AGE >17 W/O CC	1	\$2,166	\$0	\$0	\$513	\$0	\$171
335	MAJOR MALE PELVIC PROCEDURES W/O CC	1	\$0	\$14,998	\$7,339	\$0	\$1,566	\$843
337	TRANSURETHRAL PROSTATECTOMY W/O CC	1	\$2,004	\$0	\$969	\$1,062	\$0	\$354
371	CESAREAN SECTION W/O CC	1	\$3,255	\$0	\$38	\$1,994	\$0	\$123
373	VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES	2	\$3,152	\$0	\$54	\$2,345	\$0	\$0
395	RED BLOOD CELL DISORDERS AGE >17	1	\$2,586	\$0	\$1,897	\$282	\$0	\$94
396	RED BLOOD CELL DISORDERS AGE 0-17	1	\$2,908	\$0	\$29	\$460	\$0	\$0
49	399 RETICULOENDOTHELIAL & IMMUNITY DISORDERS W/O CC	1	\$3,064	\$0	\$25	\$144	\$0	\$0
423	OTHER INFECTIOUS & PARASITIC DISEASES DIAGNOSES	1	\$2,072	\$0	\$323	\$459	\$0	\$153
449	POISONING AND TOXIC EFFECTS OF DRUGS AGE >17 WITH CC	3	\$9,502	\$0	\$1,156	\$2,852	\$0	\$274
450	POISONING AND TOXIC EFFECTS OF DRUGS AGE >17 W/O CC	2	\$3,962	\$0	\$22	\$530	\$0	\$0
452	COMPLICATIONS OF TREATMENT WITH CC	1	\$2,827	\$0	\$969	\$587	\$0	\$196
463	SIGNS & SYMPTOMS WITH CC	1	\$2,228	\$0	\$0	\$0	\$0	\$0
475	RESPIRATORY SYSTEM DIAGNOSIS WITH VENTILATOR SUPPO	2	\$40,539	\$0	\$542	\$1,894	\$0	\$12
478	OTHER VASCULAR PROCEDURES WITH CC	1	\$0	\$48,547	\$11,780	\$0	\$0	\$0
		105	\$382,251	\$213,377	\$136,335	\$70,006	\$18,564	\$23,029

Cottonwood De Tucson (Tucson, AZ)

DRG 000	Institutional Charges				Professional Charges		
	Cases	Govt Pay	Oth Hlth Ins	Pnt Paymnt	Govt Pay	Oth Hlth Ins	Pnt Paymnt
4	\$11,607	\$0	\$3,869		\$80	\$0	\$177

Desert Hills Center for Youth (Tucson, AZ)

DRG 000	Institutional Charges				Professional Charges		
	Cases	Govt Pay	Oth Hlth Ins	Pnt Paymnt	Govt Pay	Oth Hlth Ins	Pnt Paymnt
7	\$18,766	\$0	\$1,289		\$224	\$0	\$56

West Center (Tucson, AZ)

DRG 000	Institutional Charges				Professional Charges		
	Cases	Govt Pay	Oth Hlth Ins	Pnt Paymnt	Govt Pay	Oth Hlth Ins	Pnt Paymnt
4	\$13,829	\$0	\$259		\$1,983	\$0	\$184

Charter of Tucson (Tucson, AZ)

DRG 000	Institutional Charges				Professional Charges		
	Cases	Govt Pay	Oth Hlth Ins	Pnt Paymnt	Govt Pay	Oth Hlth Ins	Pnt Paymnt
46	\$240,182	\$28,854	\$44,670		\$29,942	\$3,424	\$5,206

**APPENDIX 2**  
**Partnership Agreements**



# Partnership Agreements - 1995

Specialty	Provider(s)	FTE Provided	Admissions (w/ same day surgery)	Outpatient Visits
Allergy	1	0.1	0	376
ENT	1	0.14	20	438
General Surgery	2	0.2	60	1,200
Mental Health	6	5.5	0	5,656
Physician	1	1.0	0	1,800
Psychologist, PhD	1	1.0	0	1,440
Social Worker	4	4.0	0	3,096
Pediatrics	3	0.4	0	6,220
Physician	2			
Nurse Practitioner	1			
Primary Care	2	1.2	0	5,200
OB/GYN	1	0.25	108	272
Orthopedics	3	0.5	166	2,154
Urology	1	0.15	10	640
<b>20 Providers</b>			<b>14.4 FTEs</b>	

**APPENDIX 3**

**Inpatient Workload by DRG FY1995**

Inpatient Workload by DRG FY95  
Raymond W. Bliss Army Community Hospital

DRG	DESCRIPTION	Cases	CHAMPUS Cost
006	CARPAL TUNNEL RELEASE	20	\$35,781
008	PERIPH & CRANIAL NERVE & OTH NERV SYST PROC WITHOUT CC	6	\$15,942
009	SPINAL DISORDERS & INJURIES	2	\$5,291
014	SPECIFIC CEREBROVASCULAR DISORDERS EXCEPT TIA	7	\$27,924
015	TRANSIENT ISCHEMIC ATTACK AND PRECEREBRAL OCCLUSIONS	1	\$2,288
019	CRANIAL & PERIPHERAL NERVE DISORDERS W/O CC	1	\$1,936
021	VIRAL MENINGITIS	1	\$1,982
023	NONTRAUMATIC STUPOR & COMA	1	\$2,619
024	SEIZURE & HEADACHE AGE >17 WITH CC	2	\$5,539
025	SEIZURE & HEADACHE AGE >17 W/O CC	4	\$6,756
027	TRAUMATIC STUPOR & COMA, COMA >1 HR	2	\$10,765
028	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 WITH CC	1	\$3,935
032	CONCUSSION AGE >17 W/O CC	1	\$1,701
035	OTHER DISORDERS OF NERVOUS SYSTEM W/O CC	1	\$1,883
044	ACUTE MAJOR EYE INFECTIONS	1	\$1,372
065	DYSEQUILIBRIUM	2	\$2,665
069	OTITIS MEDIA & URI AGE >17 W/O CC	5	\$6,699
071	LARYNGOTRACHEITIS	1	\$872
073	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES AGE >17	1	\$1,987
078	PULMONARY EMBOLISM	1	\$4,562
079	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 WITH CC	1	\$5,998
080	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 W/O CC	2	\$7,665
082	RESPIRATORY NEOPLASMS	3	\$12,671
084	MAJOR CHEST TRAUMA W/O CC	1	\$1,802
087	PULMONARY EDEMA & RESPIRATORY FAILURE	2	\$10,008
088	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	7	\$22,785
089	SIMPLE PNEUMONIA & PLEURISY AGE >17 WITH CC	7	\$24,958
090	SIMPLE PNEUMONIA & PLEURISY AGE >17 W/O CC	10	\$21,845
091	SIMPLE PNEUMONIA & PLEURISY AGE 0-17	5	\$8,787
092	INTERSTITIAL LUNG DISEASE WITH CC	2	\$6,795
096	BRONCHITIS & ASTHMA AGE >17 WITH CC	1	\$2,687
097	BRONCHITIS & ASTHMA AGE >17 W/O CC	6	\$10,679
098	BRONCHITIS & ASTHMA AGE 0-17	4	\$5,991
100	RESPIRATORY SIGNS & SYMPTOMS W/O CC	1	\$1,576
101	OTHER RESPIRATORY SYSTEM DIAGNOSES WITH CC	2	\$5,625
102	OTHER RESPIRATORY SYSTEM DIAGNOSES W/O CC	4	\$5,745
121	CIRCULATORY DISORDERS WITH AMI & C.V. COMP DISCH ALIVE	3	\$16,869
127	HEART FAILURE & SHOCK	8	\$26,814
130	PERIPHERAL VASCULAR DISORDERS WITH CC	2	\$6,733
131	PERIPHERAL VASCULAR DISORDERS W/O CC	3	\$6,171
132	ATHEROSCLEROSIS WITH CC	2	\$4,618
133	ATHEROSCLEROSIS W/O CC	1	\$2,565
134	HYPERTENSION	2	\$3,364
138	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS WITH CC	3	\$6,251
139	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W/O CC	5	\$6,696
140	ANGINA PECTORIS	1	\$1,572
141	SYNCOPE & COLLAPSE WITH CC	1	\$1,843
142	SYNCOPE & COLLAPSE AGE W/O CC	2	\$3,047
143	CHEST PAIN	2	\$2,939
144	OTHER CIRCULATORY SYSTEM DIAGNOSES WITH CC	1	\$3,336
148	MAJOR SMALL & LARGE BOWEL PROCEDURES WITH CC	4	\$36,612
149	MAJOR SMALL & LARGE BOWEL PROCEDURES W/O CC	2	\$9,905

151	PERITONEAL ADHESIOLYSIS W/O CC	1	\$3,676
154	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE >17 WITH CC	1	\$9,700
155	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE >17 W/O CC	1	\$3,953
158	ANAL AND STOMAL PROCEDURES W/O CC	4	\$6,266
160	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >17 W/O CC	2	\$4,799
161	INGUINAL & FEMORAL HERNIA PROCEDURES AGE >17 WITH CC	1	\$2,576
164	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG WITH CC	1	\$5,646
165	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W/O CC	4	\$13,404
166	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG WITH CC	8	\$24,428
167	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W/O CC	8	\$16,318
171	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W/O CC	1	\$2,818
172	DIGESTIVE MALIGNANCY WITH CC	5	\$22,088
174	G.I. HEMORRHAGE WITH CC	4	\$10,846
175	G.I. HEMORRHAGE W/O CC	3	\$4,949
178	UNCOMPLICATED PEPTIC ULCER W/O CC	1	\$1,658
179	INFLAMMATORY BOWEL DISEASE	3	\$9,066
180	G.I. OBSTRUCTION WITH CC	3	\$7,712
181	G.I. OBSTRUCTION W/O CC	3	\$4,192
182	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORD AGE >17 WITH CC	6	\$11,918
183	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORD AGE >17 W/O CC	20	\$31,802
184	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE 0-17	8	\$7,464
185	DENTAL & ORAL DIS EXCEPT EXTRACTIONS & RESTORATIONS, AGE >17	1	\$2,397
186	DENTAL & ORAL DIS EXCEPT EXTRACTIONS & RESTORATIONS, AGE 0-17	1	\$1,286
188	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >17 WITH CC	1	\$3,338
189	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >17 W/O CC	3	\$5,036
196	CHOLECYSTECTOMY WITH C.D.E. W/O CC	1	\$4,614
197	CHOLECYSTECTOMY W/O C.D.E. WITH CC	1	\$5,594
202	CIRRHOSIS & ALCOHOLIC HEPATITIS	1	\$5,707
203	MALIGNANCY OF HEPATOBILIARY SYSTEM OR PANCREAS	1	\$3,567
204	DISORDERS OF PANCREAS EXCEPT MALIGNANCY	1	\$3,627
205	DISORDERS OF LIVER EXC MALIG, CIRR, ALC HEPA WITH CC	2	\$8,343
208	DISORDERS OF THE BILIARY TRACT W/O CC	1	\$1,655
219	LOWER EXTREM & HUMER PROC EX HIP,FOOT,FEMUR AGE >17 W/O CC	3	\$9,028
222	KNEE PROCEDURES W/O CC	11	\$34,355
223	MAJOR SHOULDER/ELBOW PROC, OR OTH UPPER EXTREMITY PROC W CC	3	\$7,414
224	SHOULDER,ELBOW OR FOREARM PROC, EXC MAJOR JOINT PROC, W/O CC	3	\$6,855
225	FOOT PROCEDURES	2	\$4,959
227	SOFT TISSUE PROCEDURES W/O CC	2	\$4,564
231	LOCAL EXCISION & REMOVAL OF INT FIX DEVICES EXC HIP & FEMUR	3	\$9,271
234	OTHER MUSCULOSKELETAL SYS & CONN TISS O.R. PROC W/O CC	3	\$10,784
236	FRACTURES OF HIP & PELVIS	1	\$2,937
243	MEDICAL BACK PROBLEMS	17	\$31,192
244	BONE DISEASES & SEPTIC ARTHROPATHIES WITH CC	1	\$4,417
245	BONE DISEASES & SEPTIC ARTHROPATHIES W/O CC	4	\$11,826
246	NON-SPECIFIC ARTHROPATHIES	1	\$1,665
247	SIGNS & SYMPTOMS OF MUSCULOSKELETAL SYSTEM & CONN TISSUE	7	\$13,120
251	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE >17 W/O CC	3	\$4,980
253	FX, SPRN, STRN & DISL OF UPARM, LOWLEG EX FOOT AGE >17 WITH CC	1	\$2,097
254	FX, SPRN, STRN & DISL OF UPARM, LOWLEG EX FOOT AGE >17 W/O CC	7	\$10,661
257	TOTAL MASTECTOMY FOR MALIGNANCY WITH CC	1	\$2,981
258	TOTAL MASTECTOMY FOR MALIGNANCY W/O CC	1	\$2,464
259	SUBTOTAL MASTECTOMY FOR MALIGNANCY WITH CC	1	\$2,069
267	PERIANAL & PILONICAL PROCEDURES	3	\$4,281
269	OTHER SKIN, SUBCUT TISS & BREAST PROCEDURE WITH CC	1	\$5,417
270	OTHER SKIN, SUBCUT TISS & BREAST PROCEDURE W/O CC	1	\$2,001
272	MAJOR SKIN DISORDERS WITH CC	1	\$3,897
274	MALIGNANT BREAST DISORDERS WITH CC	1	\$3,469

276	NON-MALIGNANT BREAST DISORDERS	2	\$3,459
277	CELLULITIS AGE >17 WITH CC	2	\$4,960
278	CELLULITIS AGE >17 W/O CC	8	\$13,367
279	CELLULITIS AGE 0-17	1	\$1,307
280	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >17 WITH CC	1	\$2,185
281	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >17 W/O CC	4	\$7,856
283	MINOR SKIN DISORDERS WITH CC	1	\$4,268
284	MINOR SKIN DISORDERS W/O CC	4	\$4,226
286	ADRENAL & PITUITARY PROCEDURES	1	\$5,585
288	O.R. PROCEDURES FOR OBESITY	1	\$4,612
290	THYROID PROCEDURES	4	\$9,001
291	THYROGLOSSAL PROCEDURES	1	\$1,440
294	DIABETES AGE >35	4	\$8,623
296	NUTRITIONAL & MISC METABOLIC DISORDERS AGE >17 WITH CC	1	\$2,857
297	NUTRITIONAL & MISC METABOLIC DISORDERS AGE >17 W/O CC	1	\$1,570
299	INBORN ERRORS OF METABOLISM	1	\$3,347
300	ENDOCRINE DISORDERS WITH CC	2	\$6,774
316	RENAL FAILURE	2	\$9,031
320	KIDNEY & URINARY TRACT INFECTIONS AGE >17 WITH CC	3	\$7,142
321	KIDNEY & URINARY TRACT INFECTIONS AGE >17 W/O CC	2	\$3,126
322	KIDNEY & URINARY TRACT INFECTIONS AGE 0-17	1	\$1,378
324	URINARY STONES W/O CC	4	\$4,244
327	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE 0-17	1	\$933
332	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE >17 W/O CC	1	\$1,758
338	TESTES PROCEDURES, FOR MALIGNANCY	1	\$2,526
347	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, W/O CC	1	\$1,603
352	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES	1	\$2,088
354	UTERINE,ADNEXA PROC FOR NON-OVAR/ADNEX MALIG WITH CC	1	\$3,949
356	FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES	2	\$4,845
358	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY WITH CC	3	\$9,897
359	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W/O CC	23	\$505,638
360	VAGINA, CERVIX & VULVA PROCEDURES	1	\$2,358
361	LAPAROSCOPY & INCISIONAL TUBAL INTERRUPTION	1	\$2,381
369	MENSTRUAL & OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS	1	\$1,240
378	ECTOPIC PREGNANCY	2	\$4,929
379	THREATENED ABORTION	1	\$1,338
380	ABORTION W/O D&C	4	\$4,535
391	NORMAL NEWBORN	10	\$3,090
392	SPLENECTOMY AGE >17	1	\$6,684
395	RED BLOOD CELL DISORDERS AGE >17	10	\$29,338
397	COAGULATION DISORDERS	3	\$7,808
398	RETICULOENDOTHELIAL & IMMUNITY DISORDERS WITH CC	1	\$3,882
399	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W/O CC	1	\$2,057
404	LYMPHOMA & NON-ACUTE LEUKEMIA W/O CC	1	\$763
415	O.R. PROCEDURE FOR INFECTIOUS & PARASITIC DISEASES	1	\$9,650
418	POSTOPERATIVE & POST-TRAUMATIC INFECTIONS	2	\$5,891
421	VIRAL ILLNESS AGE >17	10	\$16,474
422	VIRAL ILLNESS & FEVER OF UNKNOWN ORIGIN AGE 0-17	2	\$2,407
423	OTHER INFECTIOUS & PARASITIC DISEASES DIAGNOSES	3	\$11,489
425	ACUTE ADJUST REACT & DISTURBANCE OF PSYCHOSOCIAL DYSFUNCTION	7	\$12,851
426	DEPRESSIVE NEUROSES	1	\$2,010
427	NEUROSES EXCEPT DEPRESSIVE	3	\$6,611
428	DISORDERS OF PERSONALITY & IMPULSE CONTROL	1	\$3,454
429	ORGANIC DISTURBANCES & MENTAL RETARDATION	2	\$5,993
430	PSYCHOSES	10	\$30,642
434	ALC/DRUG ABUSE OR DEPENDENCE, DETOX OR OTHER SYMPT TRT WITH CC	2	\$5,087
440	WOUND DEBRIDEMENTS FOR INJURIES	1	\$4,381

442 OTHER O.R. PROCEDURES FOR INJURIES WITH CC	3	\$23,224
443 OTHER O.R. PROCEDURES FOR INJURIES W/O CC	1	\$2,737
444 TRAUMATIC INJURY AGE >17 WITH CC	3	\$7,592
445 TRAUMATIC INJURY AGE >17 W/O CC	4	\$12,839
447 ALLERGIC REACTIONS AGE >17	1	\$1,404
449 POISONING AND TOXIC EFFECTS OF DRUGS AGE >17 WITH CC	4	\$8,881
451 POISONING AND TOXIC EFFECTS OF DRUGS AGE 0-17	2	\$2,339
455 OTHER INJURY, POISONING & TOXIC EFF DIAG W/O CC	1	\$809
461 O.R. PROC W DIAGNOSES OF OTHER CONTACT WITH HEALTH SERVICES	1	\$4,235
464 SIGNS & SYMPTOMS W/O CC	1	\$1,715
465 AFTERCARE WITH HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS	1	\$1,260
467 OTHER FACTORS INFLUENCING HEALTH STATUS	1	\$1,057
468 EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS	3	\$20,553
486 OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA	1	\$13,610
489 HIV WITH MAJOR RELATED CONDITION	1	\$6,055
493 LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. WITH CC	1	\$4,588
494 LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W/O CC	6	\$17,472
627 NEONATE, BIRTHWT >2499G, W/O SIGNIF OR PROC, W MAJOR PROBLEM	1	\$2,677
628 NEONATE, BIRTHWT >2499G, W/O SIGNIF OR PROC, W MINOR PROBLEM	2	\$3,382
630 NEONATE, BIRTHWT >2499G, W/O SIGNIF OR PROC, W OTHER PROBLEM	1	\$506
900 ALC/DRUG ABU/DEPND, DETOX/OTH SYM TREAT AGE <= 21 W/O CC	6	\$7,307
901 ALC/DRUG ABU/DEPND, DETOX/OTH SYM TREAT AGE >21 W/O CC	33	\$44,324

Total 590 \$1,904,103

**APPENDIX 4**  
**MEDCOM Manpower Assessment Model Results**

<u>PARA</u>	<u>LN</u>	<u>POS</u>	<u>POSITION</u>	<u>GR</u>	<u>POSCO</u>	<u>REQ</u>	<u>AUTH</u>	<u>CIV PAY</u>	<u>MIL PAY</u>	<u>NOTES</u>
102M 00 00 IR&ACO										
102M	01	01	AUDITOR	12	00511	1	1	\$64,553		Deleted 0197
450 00 00 DEPT NSG										
451	02	01	C NUR ADM	05	66A	1	1		\$54,285	
453 00 00 CENT MAT SVC										
453	02	01	CMS SP	E4	91D10	1	1		\$32,130	
453	03	01	CMS SP	E3	91D10	1	1		\$32,130	
453	03	02	CMS SP	E3	91D10	1	1		\$32,130	
453	04	02	MED SUP TECH	04	00622	1	1	\$26,258		
466 00 00 MED NSG SVC										
466Q	01	01	CLIN HD NUR	04	66H00	1	1		\$54,285	Vacant
466Q	02	01	PED NUR	03	66D00	1	1		\$54,285	Vacant
466Q	03	01	MED SURG NUR 03	66H00		1	1		\$54,285	
466Q	03	02	MED SURG NUR 03	66H00		1	1		\$54,285	
466Q	04	01	CLIN NUR	02	66J00	1	1		\$54,285	
466Q	06	01	WDMSTR	E7	91C40	1	1		\$32,130	
466Q	07	01	PRAC NUR	E6	91C30	1	1		\$32,130	
466Q	08	01	PRAC NUR	E5	91C20	1	1		\$32,130	Vacant
466Q	08	02	PRAC NUR	E5	91C20	1	1		\$32,130	Vacant

466Q 08 03 PRAC NUR	E5 91C20	1 1	\$32,130	
466Q 10 01 MED SP	E4 91B10	1 1	\$20,400	Vacant
466Q 12 01 CLIN NUR	10 00610	1 1	\$47,581	
466Q 12 02 CLIN NUR	10 00610	1 1	\$47,581	
466Q 13 01 PRAC NUR	05 00620	1 1	\$29,378	
466Q 13 02 PRAC NUR	05 00620	1 1	\$29,378	Vacant
466Q 14 01 MED CLK	04 00679	1 1	\$26,258	

469 00 00 OR NSG SVC

469 02 02 OR NUR	03 66E	1 1	\$54,285	
469 07 01 OR SP	E3 91D10	1 1	\$32,130	
469 07 02 OR SP	E3 91D10	1 1	\$32,130	
469 07 03 OR SP	E3 91D10	1 1	\$32,130	
469 07 04 OR SP	E3 91D10	1 1	\$32,130	

600 00 00 DEPT RADIOL

601 10 01 SECY (OA)	05 00318	1 1	\$29,378	
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620 00 00 DEPT PATH

621 02A 01 PATH	03 61U	1 1	\$91,433	Vacant
621 06 01 MED SUP SP	E5 76J20	1 1	\$20,400	
621 06 04 MED LAB SP	E3 92B10	1 1	\$32,130	

640 00 00 PHARM SVC

641 09 06 PHARMACIST 11 00660 1 1 \$53,863

705D 00 00 MAT MGT SEC

705D 04 01 PURCH AGENT04 11055 1 1 \$26,258 Vacant

705E 00 00 STORAGE SEC

705E 02 01 MED SUP SP E4 76J10 1 1 \$20,400

708B 00 00 HSKPG

708B 03 03 CUST WORK 03 03556 1 1 \$28,672

720 00 00 PAT ADMIN DIV

721 01 01 C PAT ADM 04 70E67 1 1 \$54,285

722 00 00 MED REC BR

722 01 01 PAT ADM NCOE6 71G30 1 1 \$20,400

722 03 01 MED REC 09 00669 1 1 \$44,514 Deleted 0296  
ADMIN SP

722 06 01 MED REC TECH05 00675 1 1 \$29,378 Vacant

723 00 00 OP MED REC

723 03 01 SUPV MED CLK08 00679 1 1 \$40,305

723 05 04 MED CLK 04 00679 1 1 \$26,258

723 05 05 MED CLK 04 00679 1 1 \$26,258

724A 00 00 ADMIT&DISPOS

724A 01 01 PNT ADM NCOE6	71G30	1 1	\$20,400
724A 03 02 PNT ADM SP E4	71G10	1 1	\$20,400
724A 04 01 PNT ADM SP E3	71G10	1 1	\$20,400
724A 06A 01 MED CLK 04	00679	1 1	\$26,258

724B 00 00 CLAIMS SEC

724B 01 03 CLAIMS CLK (OA)05 00998	1 1	\$29,378	Deleted 0296
724B 01 04 CLAIMS CLK (OA)05 00998	1 1	\$29,378	Deleted 0296
724B 02 01 ACCTG TECH 05	00525	1 1	\$29,378

731A 00 00 HOSP CO

731A 01 01 MED CO CDR 02	70B67	1 1	\$54,285	
731A 04 01 SUP SP E4	92Y10	1 1	\$20,400	Vacant

731L 00 00 PAC

731L 05 01 PER LAI CLK(OA)05 00303	1 1	\$29,378
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740 00 00 NUTR CARE DIV

741 01 01 C NUTR CARE 03	65C	1 1	\$54,285
741 02 01 HOSP FS NCO E6	91M30	1 1	\$20,400
741 03 01 FS CLK (OA) 05	00303	1 1	\$29,378

742 00 00 CLN DIET

742A 01 01 DIET AIDE 04 00640 1 1 \$26,258

743 00 00 PROD&SVC

743 01 01 HOSP FS SGT E5 91M20 1 1 \$20,400

743A 00 00 FOOD PREP

743A 01 01 COOK SUPV 08 07404 1 1 \$49,618

743A 02 01 HOSP FS SP E4 91M10 1 1 \$20,400

743A 02 02 HOSP FS SP E4 91M10 1 1 \$20,400

743A 03 01 HOSP FS SP E3 91M10 1 1 \$20,400

743A 04 01 COOK 08 07404 1 1 \$40,232

743A 04 02 COOK 08 07404 1 1 \$40,232

743A 04 03 COOK 08 07404 1 1 \$40,232 Deleted 1095

743A 04 04 FS WORKER 04 07408 1 1 \$31,104 Deleted 1095

743A 05 01 BAKER 05 07402 1 1 \$33,508

743E 00 00 PNT TRAY

743E 01 01 FS WRK LDR 04 07408 1 1 \$32,935 Deleted 0296

743E 03 01 COOK 04 07404 1 1 \$31,104

743E 04 01 FS WORKER 04 07408 1 1 \$31,104 Delete 0197

743E 04 02 FS WORKER 04 07408 1 1 \$31,104

743E 04 03 FS WORKER 04 07408 1 1 \$31,104

743G 00 00 SPT SVC

743G 01 01 FS WORKER 02	07408	1 1	\$26,268	
743G 01 02 FS WORKER 02	07408	1 1	\$26,268	
743G 01 03 FS WORKER 02	07408	1 1	\$26,268	Deleted 1095
761 05 01 CLIN NURS 10	00610	1 1	\$47,581	Vacant

Positions not indicated by the MEDCOM model to be cut, but added for the purposes of this study:

466Q 03 03 MED SURG NUR03 66H00	1 1	\$54,285		
466Q 04 02 CLIN NUR 02	66J00	1 1	\$54,285	
708B 04 04 CUST WORK 02	03566	1 1	\$26,268	
743 88 01 HOSP FD SGTE5	91M20	1 1	\$32,130	Excess
743E 02 01 COOK SUPV 08	07408	1 1	\$49,618	Vacant

Totals	(26 slots) Civ Pay	\$987,674
	(33 slots) Mil Pay	\$1,141,080
	Combined Total	\$2,128,754

Notes: Positions identified as being deleted, vacant or excess are not included in the total pay calculations. These positions were on the initial MEDCOM model results, but dropped out during the process of this study.

**APPENDIX 5**  
**MEPRS Inpatient Costing Worksheets**



12 22 2201 HRS

FT. BUCHUCA  
AZIAA

MEPRS

DETAILED MEDICAL EXPENSE AND PERFORMANCE

PCN COPY-012

PAGE 2

PART I MEDICAL EXPENSE REPORT

PATIENT SERVICES

TOTAL EXPENSES	CLINIC'S SALARIES	BEDS OCCUPIED	COST PER ORD	TOTAL DISPS	COST PER DISP	COST PER ADMIS	COST PER ADMIS	VALDS	ADPL
5463747	119670	2682	2039.06	1386	3945.70	1424	3840.41	1.9	7.3

\*VALDS=DISP/DISPOSITIONS      \*ADPL=DISP/NUMBER OF DAYS IN PERIOD

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### MEPRS Inpatient Cost Savings for FY 1995

Inpatient Indirect Supply Cost	\$734,068
Food Service Indirect Supply Cost	\$152,974
Inpatient Indirect Equipment Cost	\$153,070
Food Service Indirect Equipment Cost	\$9,114
Inpatient Indirect Contract Cost	\$268,880
Direct Contract: Reduction of Cable TV Outlets	\$432
Direct Contract: Reduction of Linen Contract	\$74,750
Food Service Indirect Contract Costs	\$58,893
Direct Cost: Terminate FSD Beverage Dispenser Lease	\$2,400
Inpatient Indirect TDY Cost	<u>\$32,519</u>
 Total Inpatient MEPRS Cost Savings	 \$1,487,100

Inpatient  
Indirect Supply Cost

CHG_ACT	SEEC	EXPENSE
DAAA PHARMACY MAIN	26 Supplies and Materials	\$94,809
DAAB PHARMACY PX BRANCH	26 Supplies and Materials	\$1,302
DBAA CLINICAL PATHOLOGY	26 Supplies and Materials	\$13,544
DBBA ANATOMICAL PATHOLOGY	26 Supplies and Materials	\$1,061
DBCA BLOOD BANK	26 Supplies and Materials	\$2,460
DCAA RADIOLOGY	26 Supplies and Materials	\$3,773
DDAA EKG	26 Supplies and Materials	\$23
DDDA PULMONARY FUNCTION	26 Supplies and Materials	\$203
DEAA CENTRAL STERILE SUPPLY	26 Supplies and Materials	\$156
DFAA ANESTHESIOLOGY	26 Supplies and Materials	\$35,307
DFBA SURGICAL SUITE	26 Supplies and Materials	\$360,376
DFCA RECOVERY ROOM	26 Supplies and Materials	\$18,493
DGAA SAME DAY SURGERY	26 Supplies and Materials	\$15,838
DHAA INHALATION/RESPIRATORY THERAPY	26 Supplies and Materials	\$4,738
EBAA COMMAND	26 Supplies and Materials	\$4,020
EBAC TRICARE BRANCH	26 Supplies and Materials	\$4,939
EBAE CLINICAL SUPPORT DIVISION	26 Supplies and Materials	\$256
EBBA SPECIAL STAFF	26 Supplies and Materials	\$434
EBCA ADMINISTRATION	26 Supplies and Materials	\$11,803
EBCB RESOURCE MANAGEMENT DIVISION	26 Supplies and Materials	\$720
EBCC FORCE DEVELOPMENT	26 Supplies and Materials	\$44
EBCD PERSONNEL DIVISION	26 Supplies and Materials	\$1,899
EBCE HOSPITAL TREASURER	26 Supplies and Materials	\$146
EBCF OPERATIONS	26 Supplies and Materials	\$607
EBDA DEPT OF MEDICINE	26 Supplies and Materials	\$15
EBDB DEPT OF SURGERY	26 Supplies and Materials	\$88
EBDD C, DEPT PEDS	26 Supplies and Materials	\$6
EBDF DEPT OF PSYCHIATRY	26 Supplies and Materials	\$2
EBDI C, DEPARTMENT OF NURSING	26 Supplies and Materials	\$2,612
EBFA EDUCATION & TRAINING PROG SPT	26 Supplies and Materials	\$135
EBFG STAFF MEDICAL LIBRARY	26 Supplies and Materials	\$1,081
EBFH OTHER EDUCATION & TRAINING SUP	26 Supplies and Materials	\$2
EBHA THIRD PARTY COLLECTIONS	26 Supplies and Materials	\$171
EDCA REIMBURSEABLE MAINT REAL PROP	26 Supplies and Materials	\$2,849
EDDA MINOR CONSTRUCTION-FUNDED HUA	26 Supplies and Materials	\$89
EDJA COMMUNICATIONS-FUNDED HUA	26 Supplies and Materials	\$12
EDKB ELEC/COMM EQUIP&CMD GP REIM	26 Supplies and Materials	\$75
EEAA LOGISTICS	26 Supplies and Materials	\$3,477
EFAA HOUSEKEEPING-IN HOUSE HUA	26 Supplies and Materials	\$2,984
EGAA BIOMEDICAL EQUIP REPAIR-IN HOU	26 Supplies and Materials	\$4,669
EHAA LAUNDRY-IN HOUSE HUA	26 Supplies and Materials	\$945
EIAA PATIENT FOOD OPERATIONS	26 Supplies and Materials	\$37,067
EICA INPATIENT CLINICAL DIETETICS	26 Supplies and Materials	\$407
EJAA INPATIENT AFFAIRS	26 Supplies and Materials	\$62,867
	Subtotal	\$696,500

Direct Costs  
(Supplies, Travel, Equipment)

\$37,568

Grand Total \$734,068

Food Service  
Indirect Supply Cost

CHG_ACT	SEEC	EXPENSE
EBAA COMMAND	26 Supplies and Materials	\$461
EBAE CLINICAL SUPPORT DIVISION	26 Supplies and Materials	\$29
EBBA SPECIAL STAFF	26 Supplies and Materials	\$50
EBCA ADMINISTRATION	26 Supplies and Materials	\$1,353
EBCB RESOURCE MANAGEMENT DIVISION	26 Supplies and Materials	\$83
EBCC FORCE DEVELOPMENT	26 Supplies and Materials	\$5
EBCD PERSONNEL DIVISION	26 Supplies and Materials	\$218
EBCE HOSPITAL TREASURER	26 Supplies and Materials	\$17
EBCF OPERATIONS	26 Supplies and Materials	\$70
EBFA EDUCATION & TRAINING PROG SPT	26 Supplies and Materials	\$15
EBFG STAFF MEDICAL LIBRARY	26 Supplies and Materials	\$124
EBFH OTHER EDUCATION & TRAINING SUP	26 Supplies and Materials	\$0
EDCA REIMBURSEABLE MAINT REAL PROP	26 Supplies and Materials	\$2,553
EDDA MINOR CONSTRUCTION-FUNDED HUA	26 Supplies and Materials	\$79
EDJA COMMUNICATIONS-FUNDED HUA	26 Supplies and Materials	\$1
EDKB ELEC/COMM EQUIP&CMD GP REIM	26 Supplies and Materials	\$9
EFAA HOUSEKEEPING-IN HOUSE HUA	26 Supplies and Materials	\$536
EGAA BIOMEDICAL EQUIP REPAIR-IN HOU	26 Supplies and Materials	\$116
EIBA COMBINED FOOD OPERATIONS	26 Supplies and Materials	\$13,507
EIXA COST POOL FOOD OPERATIONS	26 Supplies and Materials	\$56,724
	Subtotal	\$75,949
Direct Costs (Supplies, Travel, Equipment)		\$77,025
	Grand Total	\$152,974

Inpatient  
Indirect Equipment Cost

CHG_ACT		SEEC	EXPENSE
DAAA	PHARMACY MAIN	31 Equipment	\$952
DAAB	PHARMACY PX BRANCH	31 Equipment	\$13
DBAA	CLINICAL PATHOLOGY	31 Equipment	\$740
DBBA	ANATOMICAL PATHOLOGY	31 Equipment	\$22
DBCA	BLOOD BANK	31 Equipment	\$27
DCAA	RADIOLOGY	31 Equipment	\$360
DDAA	EKG	31 Equipment	\$1
DDDA	PULMONARY FUNCTION	31 Equipment	\$22
DEAA	CENTRAL STERILE SUPPLY	31 Equipment	\$3
DFAA	ANESTHESIOLOGY	31 Equipment	\$612
DFBA	SURGICAL SUITE	31 Equipment	\$27,643
DFCA	RECOVERY ROOM	31 Equipment	\$393
DGAA	SAME DAY SURGERY	31 Equipment	\$1,391
DHAA	INHALATION/RESPIRATORY THERAPY	31 Equipment	\$511
EBAA	COMMAND	31 Equipment	\$83
EBAC	TRICARE BRANCH	31 Equipment	\$67
EBAE	CLINICAL SUPPORT DIVISION	31 Equipment	\$1
EBBA	SPECIAL STAFF	31 Equipment	\$1
EBCA	ADMINISTRATION	31 Equipment	\$536
EBCB	RESOURCE MANAGEMENT DIVISION	31 Equipment	\$24
EBCC	FORCE DEVELOPMENT	31 Equipment	\$2
EBCD	PERSONNEL DIVISION	31 Equipment	\$42
EBCE	HOSPITAL TREASURER	31 Equipment	\$5
EBCF	OPERATIONS	31 Equipment	\$4
EBDA	DEPT OF MEDICINE	31 Equipment	\$1
EBDB	DEPT OF SURGERY	31 Equipment	\$3
EBDD	C, DEPT PEDS	31 Equipment	\$0
EBDF	DEPT OF PSYCHIATRY	31 Equipment	\$0
EBDI	C, DEPARTMENT OF NURSING	31 Equipment	\$24
EBFA	EDUCATION & TRAINING PROG SPT	31 Equipment	\$4
EBFG	STAFF MEDICAL LIBRARY	31 Equipment	\$2
EBFH	OTHER EDUCATION & TRAINING SUP	31 Equipment	\$0
EBHA	THIRD PARTY COLLECTIONS	31 Equipment	\$1
EEAA	LOGISTICS	31 Equipment	\$328
EFAA	HOUSEKEEPING-IN HOUSE HUA	31 Equipment	\$53
EGAA	BIOMEDICAL EQUIP REPAIR-IN HOU	31 Equipment	\$583
EHAA	LAUNDRY-IN HOUSE HUA	31 Equipment	\$291
EIAA	PATIENT FOOD OPERATIONS	31 Equipment	\$4,063
EICA	INPATIENT CLINICAL DIETETICS	31 Equipment	\$13
EJAA	INPATIENT AFFAIRS	31 Equipment	\$114,249
	Total		\$153,070

Food Service  
Indirect Equipment Cost

CHG_ACT		SEEC	EXPENSE
EBAA	COMMAND	31 Equipment	\$10
EBAE	CLINICAL SUPPORT DIVISION	31 Equipment	\$0
EBBA	SPECIAL STAFF	31 Equipment	\$0
EBCA	ADMINISTRATION	31 Equipment	\$61
EBCB	RESOURCE MANAGEMENT DIVISION	31 Equipment	\$3
EBCC	FORCE DEVELOPMENT	31 Equipment	\$0
EBCD	PERSONNEL DIVISION	31 Equipment	\$5
EBCE	HOSPITAL TREASURER	31 Equipment	\$1
EBCF	OPERATIONS	31 Equipment	\$1
EBFA	EDUCATION & TRAINING PROG SPT	31 Equipment	\$0
EBFG	STAFF MEDICAL LIBRARY	31 Equipment	\$0
EBFH	OTHER EDUCATION & TRAINING SUP	31 Equipment	\$0
EFAA	HOUSEKEEPING-IN HOUSE HUA	31 Equipment	\$10
EGAA	BIOMEDICAL EQUIP REPAIR-IN HOU	31 Equipment	\$15
EIBA	COMBINED FOOD OPERATIONS	31 Equipment	\$589
EIXA	COST POOL FOOD OPERATIONS	31 Equipment	\$8,420
	Total		\$9,114

Inpatient  
Indirect Contract Cost

CHG_ACT	SEEC	EXPENSE
DAAA	25 Purchased Svcs frm Indust	\$6,302
DAAB	25 Purchased Svcs frm Indust	\$70
DBAA	25 Purchased Svcs frm Indust	\$11,896
DBBA	25 Purchased Svcs frm Indust	\$1,576
DBCA	25 Purchased Svcs frm Indust	\$405
DCAA	25 Purchased Svcs frm Indust	\$11,341
DDAA	25 Purchased Svcs frm Indust	\$18
DDDA	25 Purchased Svcs frm Indust	\$59
DEAA	25 Purchased Svcs frm Indust	\$134
DFAA	25 Purchased Svcs frm Indust	\$13,869
DFBA	25 Purchased Svcs frm Indust	\$66,860
DFCA	25 Purchased Svcs frm Indust	\$11,021
DGAA	25 Purchased Svcs frm Indust	\$22,109
DHAA	25 Purchased Svcs frm Indust	\$1,853
EBAA	25 Purchased Svcs frm Indust	\$1,859
EBAC	25 Purchased Svcs frm Indust	\$2,035
EBAE	25 Purchased Svcs frm Indust	\$258
EBBA	25 Purchased Svcs frm Indust	\$1,386
EBCA	25 Purchased Svcs frm Indust	\$4,718
EBCB	25 Purchased Svcs frm Indust	\$742
EBCC	25 Purchased Svcs frm Indust	\$24
EBCD	25 Purchased Svcs frm Indust	\$635
EBCE	25 Purchased Svcs frm Indust	\$139
EBCF	25 Purchased Svcs frm Indust	\$922
EBDA	25 Purchased Svcs frm Indust	\$8
EBDB	25 Purchased Svcs frm Indust	\$49
EBDD	25 Purchased Svcs frm Indust	\$3
EBDF	25 Purchased Svcs frm Indust	\$1
EBDI	25 Purchased Svcs frm Indust	\$1,464
EBFA	25 Purchased Svcs frm Indust	\$350
EBFG	25 Purchased Svcs frm Indust	\$492
EBFH	25 Purchased Svcs frm Indust	\$1
EBHA	25 Purchased Svcs frm Indust	\$20
EDCA	25 Purchased Svcs frm Indust	\$10,430
EDDA	25 Purchased Svcs frm Indust	\$38,489
EDJA	25 Purchased Svcs frm Indust	\$201
EDKB	25 Purchased Svcs frm Indust	\$273
EEAA	25 Purchased Svcs frm Indust	\$1,203
EFAA	25 Purchased Svcs frm Indust	\$1,282
EGAA	25 Purchased Svcs frm Indust	\$8,269
EHAA	25 Purchased Svcs frm Indust	\$1,879
EIAA	25 Purchased Svcs frm Indust	\$8,989
EICA	25 Purchased Svcs frm Indust	\$230
EJAA	25 Purchased Svcs frm Indust	\$35,012
	Total	\$268,880

Direct Costs

IMD Cable TV Outlets	14% reduction (3 lines)	\$240/MONTH @ \$12/LINE
Linen Contract	25% reduction	\$299,000

Food Service  
Indirect Contract Costs

CHG_ACT	SEEC	EXPENSE
EBAA COMMAND	25 Purchased Svcs frm Indust	\$213
EBAE CLINICAL SUPPORT DIVISION	25 Purchased Svcs frm Indust	\$30
EBBA SPECIAL STAFF	25 Purchased Svcs frm Indust	\$159
EBCA ADMINISTRATION	25 Purchased Svcs frm Indust	\$541
EBCB RESOURCE MANAGEMENT DIVISION	25 Purchased Svcs frm Indust	\$85
EBCC FORCE DEVELOPMENT	25 Purchased Svcs frm Indust	\$3
EBCD PERSONNEL DIVISION	25 Purchased Svcs frm Indust	\$73
EBCE HOSPITAL TREASURER	25 Purchased Svcs frm Indust	\$16
EBCF OPERATIONS	25 Purchased Svcs frm Indust	\$106
EBFA EDUCATION & TRAINING PROG SPT	25 Purchased Svcs frm Indust	\$40
EBFG STAFF MEDICAL LIBRARY	25 Purchased Svcs frm Indust	\$56
EBFH OTHER EDUCATION & TRAINING SUP	25 Purchased Svcs frm Indust	\$0
EDCA REIMBURSEABLE MAINT REAL PROP	25 Purchased Svcs frm Indust	\$9,347
EDDA MINOR CONSTRUCTION-FUNDED HUA	25 Purchased Svcs frm Indust	\$34,491
EDJA COMMUNICATIONS-FUNDED HUA	25 Purchased Svcs frm Indust	\$23
EDKB ELEC/COMM EQUIP&CMD GP REIM	25 Purchased Svcs frm Indust	\$31
EFAA HOUSEKEEPING-IN HOUSE HUA	25 Purchased Svcs frm Indust	\$230
EGAA BIOMEDICAL EQUIP REPAIR-IN HOU	25 Purchased Svcs frm Indust	\$206
EIBA COMBINED FOOD OPERATIONS	25 Purchased Svcs frm Indust	\$5,817
EIXA COST POOL FOOD OPERATIONS	25 Purchased Svcs frm Indust	\$7,427
	Total	\$58,893

Direct Costs  
FSD Beverage Dispenser \$200/MONTH/\$2400 YEAR

Inpatient  
Indirect TDY Cost

CHG_ACT	SEEC	EXPENSE
DAAA	PHARMACY MAIN	21 Travel \$854
DAAB	PHARMACY PX BRANCH	21 Travel \$12
DBAA	CLINICAL PATHOLOGY	21 Travel \$276
DBBA	ANATOMICAL PATHOLOGY	21 Travel \$82
DBCA	BLOOD BANK	21 Travel \$49
DCAA	RADIOLOGY	21 Travel \$228
DDAA	EKG	21 Travel \$1
DDDA	PULMONARY FUNCTION	21 Travel \$8
DEAA	CENTRAL STERILE SUPPLY	21 Travel \$6
DFAA	ANESTHESIOLOGY	21 Travel \$2,015
DFBA	SURGICAL SUITE	21 Travel \$5,107
DFCA	RECOVERY ROOM	21 Travel \$716
DGAA	SAME DAY SURGERY	21 Travel \$658
DHAA	INHALATION/RESPIRATORY THERAPY	21 Travel \$199
EBAA	COMMAND	21 Travel \$1,130
EBAC	TRICARE BRANCH	21 Travel \$366
EBAE	CLINICAL SUPPORT DIVISION	21 Travel \$218
EBBA	SPECIAL STAFF	21 Travel \$201
EBCA	ADMINISTRATION	21 Travel \$322
EBCB	RESOURCE MANAGEMENT DIVISION	21 Travel \$250
EBCC	FORCE DEVELOPMENT	21 Travel \$5
EBCD	PERSONNEL DIVISION	21 Travel \$448
EBCE	HOSPITAL TREASURER	21 Travel \$19
EBCF	OPERATIONS	21 Travel \$47
EBDA	DEPT OF MEDICINE	21 Travel \$2
EBDB	DEPT OF SURGERY	21 Travel \$12
EBDD	C, DEPT PEDS	21 Travel \$1
EBDF	DEPT OF PSYCHIATRY	21 Travel \$0
EBDI	C, DEPARTMENT OF NURSING	21 Travel \$98
EBFA	EDUCATION & TRAINING PROG SPT	21 Travel \$18
EBFG	STAFF MEDICAL LIBRARY	21 Travel \$8
EBFH	OTHER EDUCATION & TRAINING SUP	21 Travel \$0
EBHA	THIRD PARTY COLLECTIONS	21 Travel \$5
EDCA	REIMBURSEABLE MAINT REAL PROP	21 Travel \$335
EDJA	COMMUNICATIONS-FUNDED HUA	21 Travel \$1
EDKB	ELEC/COMM EQUIP&CMD GP REIM	21 Travel \$9
EEAA	LOGISTICS	21 Travel \$141
EFAA	HOUSEKEEPING-IN HOUSE HUA	21 Travel \$105
EGAA	BIOMEDICAL EQUIP REPAIR-IN HOU	21 Travel \$1,236
EHAA	LAUNDRY-IN HOUSE HUA	21 Travel \$51
EIAA	PATIENT FOOD OPERATIONS	21 Travel \$726
EICA	INPATIENT CLINICAL DIETETICS	21 Travel \$51
EJAA	INPATIENT AFFAIRS	21 Travel \$16,503
		\$32,519

## **APPENDIX 6**

### **CHAMPUS Health Care Summary by Primary Diagnosis**

\* HR085-007 04JAN96  
RUN DATE: 04 JAN 1996  
RUN TIME: 10:50:17  
MODE: 78, BENE ZIP

CHAMPU'S HEALTH CARE SUMMARY BY PRIMARY DIAGNOSIS  
BASED ON CARE RECEIVED FROM OCT 1994 THRU SEP 1995  
008 - BLISS AH FT HUACHUCA, AZ

PAGE: 01  
COLLECTION PERIOD: 15 MONTHS  
UNDUPLICATED

#### REPORT SPECIFICATIONS PAGE

THIS REPORT SUMMARIZES COST AND UTILIZATION DATA FOR INPATIENT AND OUTPATIENT DATA ARE PROVIDED FOR 26 MEDICAL SPECIALTIES. WITH GRAND TOTALS FOR THIS REPORT IS BASED ON BENEFICIARY RESIDENCE ZIP CODES FOR CATCHMENT AREA REPORTS. THE MILITARY HEALTH SERVICES SYSTEM CATCHMENT AREA DIRECTORY IN THE CATCHMENT AREA IS USED DURING THE REPORT PERIOD.

THIS REPORT EXCLUDES CHAMPU'S DATA CONTRACTOR DENIED CLAIMS AND CLAIMS WITH ZERO GOVERNMENT OR CONTRACTOR COST. FOR DENIED CLAIMS, THE NUMBER INCLUDED BILLED CHARGES FOR DENIED LINE ITEMS ARE INCLUDED, BUT THE NUMBER OF SERVICES IS NOT.

THIS REPORT REFLECTS CARE PROVIDED UNDER CHAMPU'S IN A FLOATING 12-MONTH PERIOD. THE DATA COLLECTION PERIOD IS 15 MONTHS. SEE THE USER'S GUIDE FOR THE CHAMPU WORKLOAD REPORTS FOR ESTIMATED COMPLETION RATES.

THIS REPORT CONTAINS STANDARD CHAMPU REFORM INITIATIVE (CRI) AND MENTAL HEALTH DEMONSTRATION (NORFOLK, VA) DATA. PLEASE NOTE THAT DATA FOR BOTH PARTNERSHIP AND NON-PARTNERSHIP CLAIMS ARE INCLUDED IN THIS REPORT.

BEGINNING WITH THE APR 93 - MAR 94 REPORT, SOME MEDICAL SPECIALTIES WERE RE-ALIGNED AND ADDED OR DELETED. THESE "GROUPS" WERE ADDED AS A SPECIALTY TO REFLECT COST AND UTILIZATION FOR OUTPATIENT PRESCRIPTION DRUGS. ALSO BEGINNING WITH THIS REPORT PERIOD, THE AVERAGE COST PER OUTPATIENT VISIT FOR INPATIENT TOTAL ACTS CATEGORIES INCLUDED IN THIS REPORT. THE INCREASE IN THE NUMBER OF OUTPATIENT DRUG COSTS ARE NOT INCLUDED IN THIS REPORT. THE NUMBER OF NON-VISIT SERVICES UNDER "DRUGS" IS THE NUMBER OF OUTPATIENT DRUG PRESCRIPTIONS FOR MORE DETAILED INFORMATION ABOUT THIS REPORT, REFER TO THE USER'S GUIDE.

CHAMPU'S  
INFORMATION SYSTEMS DIVISION  
STATISTICS BRANCH  
JULY 1994

HR01

HRO85-007 04JAN1996  
 RUN DATE: 04 JAN 1996  
 RUN TIME: 10:50:17  
 CODE: 7B-BEN-E ZIP: \*\*\*  
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CHAMPSUS HEALTH CARE SUMMARY BY PRIMARY DIAGNOSIS  
 BASED ON CARE RECEIVED FROM OCT 1994 THRU SEP 1995

COLLECTION PERIOD: 15 MONTHS  
 UNDUPLICATED  
 \*\*\*\*\*

***** CATEGORY OF CARE - INTERNAL MEDICINE *****									
		ADVERSE REACTIONS		ALLERGY		DERMATOLOGY		ENDOCRINOLOGY	
								GASTRO-ENTEROLOGY	
								HEMATOLOGY	
I	INPATIENT HOSPITAL SERVICES	USER BENEFICIARIES	85	12	45	10	7	12	1100
DEPTN OF ACT DUTY SPONSOR	1229	14	22	18	11	11	4	14	14
RETIREE DEPTN OF RET OR DEC SPONSOR	20	15	52	507	1	27	1	12	12
TOTAL HOSPITAL ADMISSIONS	2,022	2,022	5,90	5,90	1,000	3,80	3,42	3,00	3,00
HOSPITAL DAYS	0,05	0,05	0,12	0,12	0,04	0,07	0,07	0,03	0,03
AVERAGE LENGTH OF STAY (DAYS)	18,912	18,912	26,712	40,712	40,68	2,072	10,609	20,516	20,516
AVERAGE DAILY PATIENT LOAD	1,173	1,173	2,579	4,754	4,754	2,323	1,609	2,134	2,134
TOTAL GOVERNMENT COST	2,524	2,524	3,227	5,042	5,042	3,95	2,722	3,95	3,95
TOTAL GOVT AND PATIENT COST	2,524	2,524	7,835	9,200	9,200	7,263	5,008	9,200	9,200
AVG GOV COST PER ADMISSION	2,524	2,524	1,597	2,072	2,072	1,596	1,500	1,597	1,597
AVG GOV COST PER DAY	2,524	2,524	1,597	2,072	2,072	1,596	1,500	1,597	1,597
II	INPATIENT PROFESSIONAL SERVICES	USER BENEFICIARIES	115	12	106	5	8	32	430
DEPTN OF ACT DUTY SPONSOR	145	16	18	52	12	12	5	15	15
RETIREE DEPTN OF RET OR DEC SPONSOR	245	37	36	904	11	28	16	17	17
NUMBER OF VISITS	1,874	2,384	105	197	700	2,990	12,161	544	544
TOTAL GOVERNMENT COST	1,247	2,335	49	736	784	6,002	12,498	511	511
TOTAL PATIENT COST	2,121	2,719	154	933	784	3,592	14,659	555	555
III	TOTAL INPATIENT SERVICES	USER BENEFICIARIES	14	17	109	6	9	36	430
DEPTN OF ACT DUTY SPONSOR	16	17	18	54	12	2	5	16	16
RETIREE DEPTN OF RET OR DEC SPONSOR	20,816	28,664	512	665	2,773	13,689	32,677	3,451	3,451
TOTAL GOVERNMENT COST	21,718	26,195	1,25	310	2,407	16,211	35,954	3,400	3,400
TOTAL GOVT AND PATIENT COST	2,312	2,89	3,10	789	3,180	1,965	6,301	3,491	3,491
AVG GOV COST PER ADMISSION	2,040	2,89	1,651	45	2,773	1,507	2,797	1,503	1,503
IV	OUTPATIENT PROFESSIONAL SERVICES	USER BENEFICIARIES	115	753	515	5	5	36	430
DEPTN OF ACT DUTY SPONSOR	62	60	592	592	356	126	126	14	14
RETIREE DEPTN OF RET OR DEC SPONSOR	12	23	23	235	204	79	217	10	10
NUMBER OF VISITS	1,611	1,432	1,454	1,870	805	287	810	129	129
TOTAL GOVERNMENT COST	1,705	1,704	1,870	1,870	836	206	766	147	147
TOTAL PATIENT COST	11,773	49,589	176	870	97	785	39,951	71,373	71,373
TOTAL GOVT AND PATIENT COST	11,773	49,589	176	870	97	785	39,951	71,373	71,373
AVG GOV COST PER VISIT	1,731	584	584	874	11,79	7,76	11,706	81,733	81,733
V	OUTPATIENT CARE COST SHARED AS INPATIENT	USER BENEFICIARIES	0	0	0	0	0	0	0
DEPTN OF ACT DUTY SPONSOR	0	0	0	0	0	0	0	0	0
RETIREE DEPTN OF RET OR DEC SPONSOR	0	0	0	0	0	0	0	0	0
TOTAL GOVERNMENT COST	0	0	0	0	0	0	0	0	0
TOTAL PATIENT COST	0	0	0	0	0	0	0	0	0
TOTAL GOVT AND PATIENT COST	0	0	0	0	0	0	0	0	0
VI	TOTAL INPATIENT AND OUTPATIENT CARE	USER BENEFICIARIES	124	764	560	647	150	587	587
DEPTN OF ACT DUTY SPONSOR	13	62	62	219	358	40	283	17	17
RETIREE DEPTN OF RET OR DEC SPONSOR	466	261	686	632	50	362	35,961	225	225
TOTAL GOVERNMENT COST	32,599	77,411	61,411	61,411	61,411	2,506	109,424	74,625	74,625
TOTAL PATIENT COST	9,246	16,411	21,203	21,203	21,203	2,508	55,951	10,542	10,542
TOTAL GOVT AND PATIENT COST	41,835	93,372	89,889	89,889	89,889	4,516	165,864	85,424	85,424

NOTE: REFER TO PAGE 1 (SPECIFICATIONS PAGE) OF THIS REPORT FOR CLARIFICATION OF THE DATA WHICH APPEARS ON THIS REPORT.

UN085-007 (L01R-J6Q)  
 RUN DATE: 04 JAN 1996  
 RUN TIME: 10:50:17  
 MODE: 7D, DENE, 21P

CHAMPU'S HEALTH CARE SUMMARY BY PRIMARY DIAGNOSIS  
 BASED ON CARE RECEIVED FROM OCT 1994 THRU SEP 1995  
 008 - BLISS, FT HUACHUCA, AZ

PAGE: 03  
 COLLECTION PERIOD: 15 MONTHS  
 UNDUPLICATED  
 \*\*\*\*\*

\*\*\*\*\* CATEGORY OF CARE - INTERNAL MEDICINE \*\*\*\*\*

	INFECTIOUS DISEASE	NEPHROLOGY	NEUROLOGY	NUTRITIONAL	PULMONARY/ RESPIRATORY	RHEUMATOLOGY	OTHER
<b>I INPATIENT HOSPITAL SERVICES</b>							
USER BENEFICIARIES	320	0	12	1100	30	6	459
DEPTN OF ACT DUTY SPONSOR	0	0	4	11	14	445	445
RETIREE	0	0	4	11	14	14	14
DEPTN OF RET OR DEC SPONSOR	0	0	13	134	13	3	3
TOTAL HOSPITAL DAYS	16	0.00	5.66	1.00	158	7	962
HOSPITAL LENGTH OF STAY (DAYS)	5.304	0.00	0.219	0.00	4.459	6.14	210
AVERAGE DAILY PATIENT LOAD	14,956	0.00	61,878	1,292	177,919	35,012	2,166
TOTAL GOVERNMENT COST	14,956	0.00	12,093	1,25	104,432	11,648	475,132
TOTAL GOVT AND PATIENT COST	15,209	0.00	12,853	1,217	282,351	11,759	488,654
Avg Govt Cost per Admission	4,985	0.00	4,909.97	1,292.00	5,232.91	5,023.00	1,028.423
Avg Govt Cost per Day	4,934.75	0.00	4,909.97	1,292.00	5,232.91	5,023.00	1,489.83
<b>II INPATIENT PROFESSIONAL SERVICES</b>							
USER BENEFICIARIES	12	8	31	0	84	14	480
DEPTN OF ACT DUTY SPONSOR	10	4	15	0	32	6	460
RETIREE	0	4	13	0	34	6	462
DEPTN OF RET OR DEC SPONSOR	0	35	166	0	109	5	1,175
NUMBER OF VISITS	55	10,663	10,251	0	154	357	1,275
NUMBER OF NON-VISIT SERVICES	29	10,663	10,746	0	31,326	13,652	96,781
TOTAL GOVERNMENT COST	7,291	13,717	11,853	0	38,479	15,562	96,590
TOTAL PATIENT COST	7,663	13,717	12,599	0	39,805	19,219	98,541
TOTAL GOVT AND PATIENT COST	7,663	13,717	12,599	0	39,805	19,219	98,541
<b>III TOTAL INPATIENT SERVICES</b>							
USER BENEFICIARIES	14	8	34	1	85	15	513
DEPTN OF ACT DUTY SPONSOR	10	4	16	0	33	6	491
RETIREE	1	4	12	0	19	6	492
DEPTN OF RET OR DEC SPONSOR	1	4	12	0	209	495	495
TOTAL GOVERNMENT COST	22,619	10,251	72,624	1,245	49,168	571,912	571,912
TOTAL PATIENT COST	23,383	13,466	86,570	1,317	17,210	581,991	581,991
TOTAL GOVT AND PATIENT COST	23,383	13,717	86,570	1,292.00	17,210	581,991	581,991
Avg Govt Cost per Admission	7,536.67	0.00	5,586.46	1,292.00	6,154.54	7,024.00	1,589.60
Avg Govt Cost per Day	7,413.69	0.00	5,068.00	1,292.00	6,154.54	7,024.00	1,589.60
<b>IV OUTPATIENT PROFESSIONAL SERVICES</b>							
USER BENEFICIARIES	333	36	349	16	1,002	221	1,349
DEPTN OF ACT DUTY SPONSOR	245	18	143	12	621	620	1,072
RETIREE	213	17	171	12	621	620	2,152
DEPTN OF RET OR DEC SPONSOR	76	675	1,815	15	1,588	1,119	1,969
NUMBER OF VISITS	375	6265	1,567	15	1,058	567	1,178
NUMBER OF NON-VISIT SERVICES	20	53,201	12,692	600	12,642	25,539	94,326
TOTAL GOVERNMENT COST	20,874	11,071	63,192	640	63,626	32,623	94,326
TOTAL PATIENT COST	53,201	11,071	72,022	720	72,022	38,302	12,730
TOTAL GOVT AND PATIENT COST	53,201	11,071	72,022	67.05	72,022	38,302	12,730
Avg Govt Cost per Visit	26,815	679.29	184,889	45.33	186,060	38,302	12,730
<b>V OUTPATIENT CARE COST SHARED AS INPATIENT</b>							
USER BENEFICIARIES	0	0	0	0	0	0	0
DEPTN OF ACT DUTY SPONSOR	0	0	0	0	0	0	0
RETIREE	0	0	0	0	0	0	0
DEPTN OF RET OR DEC SPONSOR	0	0	0	0	0	0	0
TOTAL GOVERNMENT COST	0	0	0	0	0	0	0
TOTAL PATIENT COST	0	0	0	0	0	0	0
TOTAL GOVT AND PATIENT COST	0	0	0	0	0	0	0
<b>VI TOTAL INPATIENT AND OUTPATIENT CARE</b>							
USER BENEFICIARIES	345	39	361	17	1,054	227	1,574
DEPTN OF ACT DUTY SPONSOR	256	19	148	12	643	23	1,220
RETIREE	173	139	173	12	643	83	2,745
DEPTN OF RET OR DEC SPONSOR	77	63,451	194	144	270	121	666,238
TOTAL GOVERNMENT COST	43,93	63,538	147,138	1,972	331,669	76,706	666,238
TOTAL PATIENT COST	6,324	14,817	77,989	2037	176,547	26,773	666,238
TOTAL GOVT AND PATIENT COST	49,891	77,817	221,459	2,037	208,216	104,677	709,722
NOTE: REFER TO PAGE 1 [SPECIFICATIONS PAGE] OF THIS REPORT FOR CLARIFICATION OF THE DATA WHICH APPEARS ON THIS REPORT.							

HR085-007 (00IRJ6Q)  
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CAMPUS HEALTH CARE SUMMARY BY PRIMARY DIAGNOSIS  
 BASED ON CARE RECEIVED FROM OCT 1994 THRU SEP 1995  
 008 - BLISS ALL FT HUACHUCA, AZ

PAGE: 04  
 COLLECTION PERIOD: 15 MONTHS  
 UNDUPPLICATED

***** CATEGORY OF CARE *****									
INPATIENT HOSPITAL SERVICES		NOT USED	OBSTETRICS	GYNECOLOGY	OPHTHALMOLOGY	MENTAL HEALTH	DRUGS	SPECIAL PEDIATRICS	
USER BENEFICIARIES	381	19	18	0	56	39	0	11	11
DEPTN OF ACT DUTY SPONSOR	361	10	10	0	13	13	0	0	0
RETIREE DEPTN OF RET OR DEC SPONSOR	119	19	0	0	170	0	0	224	11
TOTAL HOSPITAL DAYS	405	45	0	0	1,243	0	0	20,361	0
AVERAGE DAILY PATIENT LOAD	0.00	1.74	0.12	0.00	1,73	0.00	0.00	183,562	0
TOTAL GOVERNMENT COST	0.00	523,598	55,140	0.00	559,099	0.00	0.00	183,574	0
TOTAL GOVT AND PATIENT COST	0.00	522,492	55,140	0.00	559,099	0.00	0.00	183,574	0
Avg Govt Cost per Admission	0.00	5462.83	62,794	0.00	618,351	0.00	0.00	183,574	0
Avg Govt Cost per Day	0.00	1,292.83	2,902.11	0.00	7,450.52	0.00	0.00	16,687.47	0
II INPATIENT PROFESSIONAL SERVICES									
USER BENEFICIARIES	762	64	64	7	51	30	0	24	24
DEPTN OF ACT DUTY SPONSOR	712	41	23	10	18	10	0	1	1
RETIREE DEPTN OF RET OR DEC SPONSOR	1,135	23	14	10	506	506	0	390	390
NUMBER OF VISITS	1,821	88	144	102	31	237	0	42,846	42,846
TOTAL GOVERNMENT COST	968,046	13,73	13,73	651	32,805	34,042	0	43,160	43,160
TOTAL PATIENT COST	919,227	102,190	102,190	702	0	0	0	0	0
TOTAL GOVT AND PATIENT COST	987,973	0	0	0	0	0	0	0	0
III TOTAL INPATIENT SERVICES									
USER BENEFICIARIES	766	65	7	70	70	42	0	26	26
DEPTN OF ACT DUTY SPONSOR	715	41	6	6	590	242	0	21	21
RETIREE DEPTN OF RET OR DEC SPONSOR	52	24	10	5	651	62,057	0	226,408	226,408
NUMBER OF VISITS	1,491,718	143,558	121,427	651	652	393	0	2,328	2,328
TOTAL GOVERNMENT COST	1,491,718	143,558	121,427	702	8	475	0.00	20,582	20,582
TOTAL PATIENT COST	1,533,361	164,985	136,428	0.00	52,792	510,853	0.00	21,010	21,010
TOTAL GOVT AND PATIENT COST	3,023,079	310,543	257,825	0.00	136,564	510,853	0.00	43,160	43,160
Avg Govt Cost per Admission	0.00	2,112.81	3,190.18	0.00	4,756.9	0.00	0.00	160,811	160,811
Avg Govt Cost per Day	0.00	0	0	0	0	0	0	0	0
IV OUTPATIENT PROFESSIONAL SERVICES									
USER BENEFICIARIES	464	366	1,063	1,063	446	446	0	167	167
DEPTN OF ACT DUTY SPONSOR	39	250	191	191	136	136	0	38	38
RETIREE DEPTN OF RET OR DEC SPONSOR	0	0	160	160	86	86	0	60	60
NUMBER OF VISITS	19	212	307	307	230	230	0	69	69
TOTAL GOVERNMENT COST	5,95	6,524	5,348	8,588	8,588	8,588	0	2,058	2,058
TOTAL PATIENT COST	5,578	9,794	5,794	411,792	411,792	411,792	0	1,960	1,960
TOTAL GOVT AND PATIENT COST	1,494,718	13,642	13,642	52,792	52,792	52,792	0	12,324	12,324
Avg Govt Cost per Visit	0.00	293.58	154.84	98.86	510,853	510,853	0.00	21,010	21,010
V OUTPATIENT CARE COST SHARED AS INPATIENT									
USER BENEFICIARIES	0	0	0	0	0	0	0	0	0
DEPTN OF ACT DUTY SPONSOR	0	0	0	0	0	0	0	0	0
RETIREE DEPTN OF RET OR DEC SPONSOR	0	0	0	0	0	0	0	0	0
NUMBER OF VISITS	0	0	0	0	0	0	0	0	0
TOTAL GOVERNMENT COST	0	0	0	0	0	0	0	0	0
TOTAL PATIENT COST	0	0	0	0	0	0	0	0	0
TOTAL GOVT AND PATIENT COST	0	0	0	0	0	0	0	0	0
VI TOTAL INPATIENT AND OUTPATIENT CARE									
USER BENEFICIARIES	768	492	370	1,072	446	446	0	185	185
DEPTN OF ACT DUTY SPONSOR	717	267	395	1,659	136	136	0	60	60
RETIREE DEPTN OF RET OR DEC SPONSOR	52	233	160	114	86	86	0	70	70
NUMBER OF VISITS	0	0	0	0	0	0	0	0	0
TOTAL GOVERNMENT COST	1,497,225	241,418	53,442	1,002,128	136,564	136,564	0	270,307	270,307
TOTAL PATIENT COST	1,493,215	59,24	25,895	1,61,118	174,630	174,630	0	14,652	14,652
TOTAL GOVT AND PATIENT COST	0	0	0	0	0	0	0	284,959	284,959

NOTE: REFER TO PAGE 1 (SPECIFICATIONS PAGE) OF THIS REPORT FOR CLARIFICATION OF THE DATA WHICH APPEARS ON THIS REPORT.

10085-007 (01RJ6Q)  
RUN DATE: 04 JAN 1996  
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CHAMPS HEALTH CARE SUMMARY BY PRIMARY DIAGNOSIS  
BASED ON CARE RECEIVED FROM OCT 1994 THRU SEP 1995  
008 - BLISS A/HUACHUA, AZ

COLLECTION PERIOD: 15 MONTHS PAGE: 05

**UNDUPLICATED  
GRAND TOTAL  
FOR ALL  
CATEGORIES**

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